The Federal and State Financial Burden of Oregon's Medicaid Reform Demonstration

Final Report

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Executive Summary

1.1 Statement of the Policy Questions

Oregon Medicaid reform originally was intended to support expansion in health insurance coverage for the poor and near-poor while limiting financial costs. It did so in three ways: (1) establishing a priority list of all health care services (including some not previously covered by Oregon's Medicaid program), identifying a subset that would no longer be covered under the traditional Medicaid program; (2) waiving freedom-of-choice and enrolling Medicaid eligibles in less costly managed care plans; and (3) mandating employer insurance coverage to avoid untoward growth in the uninsured. The employer mandate never became law because of federal ERISA legislation that legally prevented the state from extending the mandate to self-insured firms. This leaves the following financial questions to be addressed in this report¹:

- 1. What impact did the program have on total and per capita expenditures by the State, Federal government, and individuals?
- 2. What impact did the program have on total Medicaid expenditures?
- 3. What is the impact of the demonstration on the mix of State versus Federal costs?
- 4. How does Oregon's rate of increase in costs compare to other States?
- 5. Was there a change in the distribution of enrollees and expenditures among the Medicaid population?

¹ Other HER reports address demonstration impacts on access, quality, utilization or enrollment.

- 6. If there is evidence of cost savings, to what extent can the relative influence of managed care be determined?
- 7. What is the evidence regarding cost savings from the priority list?
- 8. How have the sources of State funds for Medicaid changed?

A complete evaluation of the reformed Oregon Medicaid program would also consider impacts of providers, employers, and individuals. For example, did eligibility expansion encourage employees to drop coverage and save money? Did safety net providers reduce their uncompensated care burdens? Did newly enrolled individual reduce their out-of-pocket health expenditures? Answers to these questions were outside the scope of the current study and could be pursued in future, more targeted studies.

1.2 Data Sources

The impact of reform on total Medicaid expenditures is based primarily on HCFA-64 financial reports submitted regularly by states to HCFA. It should be noted that expenditure reports include a combination of any HMO premiums paid by the state plus any claims for fee-for-service patients. While "expenditures" in the state's eyes, HMO premiums do not flow through, in total, to providers. To the extent premiums are "actuarially fair," providers also bear a cost burden for Medicaid expansion to some unknown extent. HCFA 2082 data supplied by the states, annually, were used to construct a Medicaid eligibility series decomposed by age group and type of assistance.

As to the Federal-State Medicaid share, limits have been negotiated on HCFA's payments under the demonstration based on the number of new enrollees and estimated per

capita costs of both existing and new enrollees. HER staff used HCFA-64 data to conduct an analysis of the changing federal and state burdens based on an amalgam of spending impacts due to the priority list, more cost conscious managed care contracting, and enrollee expansion. We seek to isolate the three effects using actuarial methods. We used data provided by state-funded actuaries on program savings from setting the priority funding line at various points.

To address the question of revenue sources for state Medicaid expansions, HER staff acquired state revenue and expenditure data for several years prior to and during the demonstration. We identified revenue sources earmarked to cover Medicaid expansions and report any other shifts in major revenue sources (e.g., income taxes, licenses and fees, gasoline taxes). We also report on other services making major claims on taxpayer dollars besides Medicaid. To describe the challenges of funding program expansions through restrictions in the priority list, we also accessed published and unpublished task force estimates and proposals made by the governor's office.

1.3 Summary of Key Findings

- 1. What impact did the program have on total and per eligible expenditures by the state and federal governments and on individuals? Also,
- 2. What impact did the program have on total Medicaid expenditures?

The Oregon Health Plan was implemented in February, 1994. To test the overall impact of OHP, we first compared the trends in national Medicaid spending with those in Oregon before and after plan implementation (see Table 1-1).

Table 1-1

Annaul Compound Growth Trends in Medicaid Spending Before and After Implementation of the Oregon Health Plan: Nation vs. Oregon

	1991-93 Nation Oregon		1994-97 Nation Oregon		1991-97 Nation Oregon	
Total	18.0%	18.5%	5.9%	12.0%	9.9%	14.2%
Total (excl. expansion eligibles)	N/A	18.5	N/A	8.2	N/A	11.6
Per Eligible (incl. expansion)	8.7	9.0	4.6ª	7.2ª	6.2 ^a	7.9 ^a

NOTES: ^a Rates based on 1994 - 96 due to inaccurate eligibility data in Oregon for FY 97.

Between 1991-97, total Medicaid spending grew 9.9 percent annually, nationwide, versus 14.2 percent annually in Oregon. Spending growth fell both nationally and in Oregon after 1993, but much more so outside Oregon. The national rate fell by two-thirds from 18 percent annually in 1991-93 to 5.9 percent in 1994-97. In contrast, Oregon's rate of total spending fell from 18.5 to 12.0 percent annually after OHP was implemented. It is possible that the large fall in national spending may have been due to the more aggressive use of tax schemes and disproportionate share payments to hospitals outside Oregon early on in the decade. Total Oregon Medicaid spending rose \$588 million between base year 1993 and

1997. If spending on the expansion population is excluded, Oregon's post-OHP rate was 8.2 percent annually, or about one-third less than the 12 percent overall rate.

During the 1994-97 period, Oregon was rapidly expanding its eligible population. Nevertheless, Oregon's rate of spending post-OHP still exceeded the national rate on a per eligible basis, although the gap in total spending was narrowed. From 1991-93, growth in eligibles explained slightly more than half the annual growth in total Medicaid spending both nationally and in Oregon (i.e., National: (1-8.7%/18%); Oregon: (1-9%/18.5%)). Then, from 1994-96 (1997 was dropped due to poor eligibility data from Oregon), eligibility growth, nationally, explained just 22 percent of total spending growth (i.e., National: (1-4.6%/5.9%)). In contrast, eligibility growth in Oregon explained 40 percent of annual spending growth in Oregon post-OHP (i.e., Oregon: (1-7.2%/12%)).

3. What is the impact of the demonstration on the mix of state versus federal costs?

Over the 1994-97 post-OHP period, total Oregon Medicaid expenditures rose \$588 million from \$956 million in 1993 prior to OHP to \$1,544 million in 1997. The federal government contributed \$339 million to the increase while the state contributed the other \$249 million. Federal outlays grew 11.2 percent annually, post-OHP, versus 13.3 percent for the state. The discrepancy in rates is primarily due to a declining federal matching rate (FMAP) due to an improved state economy. Oregon's FMAP was 0.626 in 1993 versus 0.606 four years later. Federal spending would have been \$30.8 million more in 1997 with an unchanged FMAP. From the state's perspective, the declining FMAP caused the state to incur 5 percent more in 1997 than it would have if its FMAP had not changed.

Nationally, federal Medicaid outlays grew only 5.9 percent annually over the post-OHP time period versus 11.2 percent in Oregon. The OHP program expansion contributed substantially to the higher federal spending trend in Oregon, but slightly over 8 percent (= \$30.8/(\$339 + \$30.8) million) was "paid for," or returned, to the federal government by the state's concomitant decline in its FMAP.

4. How does Oregon's rate of increase in costs compare to other states?

In the post-OHP period from 1994-97, Oregon ranked fifth highest among the 50 states in Medicaid spending growth (at 12 percent annually). Only New Hampshire (14 percent), New Mexico (12.6), Hawaii (12.5), and Delaware (12.1) grew faster. Among the top 5 growth states, 3 are currently operating under 1115 waivers of roughly the same duration as Oregon's. The two fastest growing states, however, had no waivers. Moreover, New Hampshire had a very low percentage of eligibles in managed care (10 percent) versus 78 percent in New Mexico, implying no systematic managed care effect on spending trends.

On a per eligible basis, Oregon exhibited the 10th fastest rate of Medicaid expenditure growth (7 percent). The District of Columbia had the highest annual per eligible growth over the 1994-96 period (30 percent), followed by New Hampshire at 15 percent. Oregon's growth after 1993 was nearly identical to that of Pennsylvania, Maryland, and Florida, among others.

5. Was there a change in the distribution of enrollees and expenditures among the Medicaid population?

Enrollment trends in the pre-OHP period, 1991-93, show similar rates of annual growth for the nation and Oregon: 9.2 versus 9.5 percent, respectively. During the post-OHP period, Oregon's rate of enrollment growth fell only slightly to an annual rate of 8.6 percent while at the same time national Medicaid annual enrollment growth dropped to just 2.1 percent. Implementation of OHP, which extended Medicaid eligibility to over 100,000 new individuals, explains most of the difference.

According to data submitted to HCFA on the state's 2082 form, Oregon's enrollment of adults increased sharply to over 29 percent annually in the post-OHP period while the national adult enrollment remained unchanged for several years. At the same time, enrollment of children in Oregon fell 6.4 percent annually. Misclassification of children as adults in Oregon's reporting is believed to explain the wide divergence in growth rates. On net, 100,000 new children and adults were enrolled in the program over the 1994-96 post-OHP period. The growth in elderly enrollees in Oregon in the post-OHP period was 6.1 percent annually, almost 5 times the national average.

Oregon's number of cash assistance eligibles declined at more than 4 times the national rate since 1993, while the number of non-cash eligibles increased by almost 22 percent annually compared with a 6.6 percent rate nationally. This very high growth rate among non-cash eligibles in Oregon is consistent with the eligibility expansion to low income families under OHP. As a result, under current national welfare reform pressure, many former Oregon AFDC recipients were able to retain Medicaid health insurance coverage despite losing their AFDC cash benefits.

With the implementation of OHP, Oregon's Medicaid program has evolved from a feefor-service program serving primarily AFDC and SSI recipients to a managed care program serving many poor adults not receiving cash assistance. By the end of 1996, non-disabled working age adults constituted 47 percent of Medicaid eligibles in Oregon versus 22 percent nationally. In achieving this new demographic composition under OHP, the program has moved decisively toward a health care system serving the working poor rather than primarily cash assistance populations.

Given eligibility reporting problems, expenditures were not displayed by eligibility category.

6. If there is evidence of cost savings, to what extent can the relative influence of managed care be determined?

The scope of the research did not include a 50-state quantitative analysis of the influences of managed care on Medicaid expenditure growth. Nor was the 1991-97 time series in Oregon long enough to adequately control for the numerous changes that were taking place in Oregon as a whole or in the Medicaid program. Oregon's rate of total spending growth fell from 18 percent annually between 1991-93 to 12 percent annually in the post-OHP period and its per eligible rate fell from 9 to 7.2 percent, but it is impossible to attribute the decline to the shift to managed care. Part of the evaluation problem is the rapid expansion in the eligibility base and their differing health needs from traditional Medicaid enrollees.

One limited analysis by Coopers & Lybrand, did show that forecasted spending growth per eligible in the Phase I OHP expansion population at 6.3 percent annually, was much higher than actually observed (at 0.1 percent annually). Lower actual versus expected growth rates were also found for the Phase II disabled population. These lower rates may have been caused, in part, by enrolling eligibles in managed care plans.

Although a significant percentage of all Medicaid eligibles were enrolled in managed care by 1997, nearly 60 percent of total program spending was still being incurred in the feefor-service sector. Leading fee-for-service areas in 1997 were Home & Community-based Waivers (\$225 million), Skilled Nursing Facilities (\$169 million), and ICF/MR (\$75 million).

From 1993, before OHP was implemented, through 1997, capitated Medicaid spending rose from \$64 to \$629 million. This was due to two factors: (1) the shift from fee-for-service to managed care for established eligibles; and (2) the OHP expansion population enrolled directly into managed care. Service sectors expected to be affected by the shift to capitation (e.g., hospitals, physicians), saw their total annual expenditures fall by over \$120 million from 1993-97. But this shift was more than offset the most by the rapid expenditure growth in relatively unaffected fee-for-service sectors (e.g., nursing homes, home and community care) of \$150 million. Nevertheless, capitated payments explained 96 percent of the net growth in Medicaid outlays from 1993 through 1997.

7. What is the evidence regarding cost savings from the priority list?

In the original Section 1115 waiver application submitted to HCFA in August, 1991, the state proposed setting the coverage threshold at line 587 out of 676 condition-treatment pairs. Aggregated over the 5-year demonstration period, Coopers & Lybrand, the state's actuaries, estimated that limiting payment at line 587 would save the state \$169 million, or 2.8 percent, of the traditional Medicaid benefit package. These savings were the result of fewer covered services and include the forecasted inflation in their costs.

When OHP finally was implemented in 1994, the legislature determined that the state could cover services up to line 565 on the priority list. The funding limit was raised to line 606 shortly thereafter by the addition of mental health services. Coopers & Lybrand's updated estimate of the savings from the priority list was 8 percent less than covering all

services, including some not in traditional Medicaid, due to many other changes in the list and to various design changes.

Between 1995 and 1997, the Health Services Commission (HSC) continued to modify the priority list. In total, over 3,000 technical changes were authorized by the HSC. Line movements for 23 separate condition-pairs were authorized, and a host of new pairs were also added to the list.

From the beginning of OHP, the funding line has been raised twice. Effective January, 1996, HCFA approved a change in the threshold from line 606 to 581 that saved an estimated \$52 million annually. Treatment of chronic bronchitis, for example, was not longer covered. Because the savings from the line change accounted for only 30 percent of the needed state budget savings, Oregon requested, and HCFA approved, several other cost-cutting measures including charging premiums to expansion eligibles, dropping full-time college students, introducing eligibility asset tests, and delaying implementation of expanded mental health benefits.

Then, in April of 1996, the Oregon Medical Assistance Program (OMAP) forecasted a new shortfall of over \$18 million due, in part, to the burgeoning expansion population. Working in conjunction with HSC, a task force calculated that it would have to raise the coverage line to 434 to produce the necessary savings. As a result, treatment of bladder disorders, respiratory failure, and injuries to internal organs would fall below the funding line. Permission from HCFA was sought to raise the funding line only from 581 to 573, a shift that would have saved only \$1 million out of the needed \$18 million. HCFA eventually

approved a line movement only to 574,² and the state was forced to seek the savings elsewhere mainly by reducing updates in HMO and physician payments.

A large influx of tobacco tax revenues supported continued program expenditure growth in the 1997/99 budget, but another large shortfall of \$179 million was predicted in the 1999/2001 bi-annual budget. Initial proposals to raise the funding line to 564 would have saved \$4.4 million, only a very small portion of the needed savings, and would have left uncovered treatment of urinary obstruction and torn knee ligaments among others. Even if the state legislature were willing to implement this line movement, it was very unlikely that HCFA would have approved. Hence, modulating the coverage line to balance the state health budget was longer feasible.

It now seems clear that, in spite of hopes that the priority list could act as the principal lever to pay for program expansions, its contribution is short-lived. Politically, the state made a "pact" with its citizens, its legislators, and with HCFA identifying unnecessary services and set the line accordingly. Raising the line further naturally encroached on needed services—at least in the eyes of one or more of the key constituencies.

Moreover, it is disturbing to some policy makers to define "unnecessary services" solely based on the state's budget. Budget shortfalls do not make a particular condition/treatment pair any less meritorious or cost effective on clinical grounds. Budget-driven coverage also undermines federal authority in the Medicaid program to determine what services and patients are eligible for matching funds.

² HCFA insisted that the state cover line 574 to ensure the coverage of non-cervical warts.

The priority list also suffers from the "march of science" that makes the list somewhat obsolete after a few years. It is widely recognized that the spread of new medical technologies is the primary source behind rising health expenditures (Newhouse, 1993; Peden and Freeland, 1998; Weisbrod, 1991; Haber, et al., 1999). The priority list, while eliminating spending on some outmoded medical procedures, cannot address the cost effectiveness of new technologies unless it is periodically updated. This is a high maintenance effort that individual states may not be willing to make. As a longer-run cost containment tool, the priority list can only be effective when used in conjunction with other controls such as bundled payment and managed care that shift the spending risk of new technologies to providers.

8. How have the sources of state funds for Medicaid changed?

The 154 percent increase in the state's own spending on Medicaid between 1991 and 1997 has put a modest, but increasing, burden on Oregon taxpayers. Yet, even with rapid spending growth under OHP, the share of Gross State Income devoted to Medicaid remains less than one percent and roughly comparable to the combined financial burden of public transportation and safety. In 1991, Oregon's Medicaid financial burden was one of the lowest in the United States at 0.4 percent of Gross State Income, GSI (44th out of 51 states including D.C.). By 1997, the burden had doubled to 0.8 percent of GSI, placing the state 32nd highest out of 51 jurisdictions and on a par with Florida, Texas, and Mississippi. In contrast, New York experienced the greatest Medicaid financial burden in 1997 at 2.2 percent, followed closely by the District of Columbia at 2.1 percent. Moreover, the

progressive structure of Oregon's state tax codes suggests a real shift in the financing of health care from the poor paying out-of-pocket to the better-off segments of the population supporting OHP out of taxes. The state has no regressive sales tax and relies heavily on a progressive income tax and corporate taxes.

The principal fiscal problem for the state comes from the concomitant growth in spending on a couple of other state priorities. Passage of property tax relief has shifted spending for elementary/secondary education to the state, soaking up billions of tax dollars that might have been available for Medicaid expansion. Rapid increases in spending on public safety have further challenged OHP for the state's tax dollar. As a result, spending on higher education has fallen sharply as a percent of the state's outlays from 16 to 11 percent.

Finally, two earmarked funding sources for OHP have either been less reliable than expected or simply too small to make a material difference. Tobacco revenues, which exceeded \$200 million in 1998 due to a near doubling of the tax rate, are projected to fall in future years as smoking rates decline. Tobacco revenues supported roughly 25 percent of the state's spending on OHP at its peak but, rather than keeping pace with inflation in the future, have been declining in absolute dollars due to declining smoking rates. Furthermore, collecting premiums on expansion eligibles, which was approved by HCFA in the 1995-97 state budget, provides only minuscule support for continuing the expansions. Only \$8.4 million in premiums was collected by the state over the 1995-97 period, amounting to 1.2 percent of the state's biennial OHP spending and just 4.8 percent of state spending on the

expansion population. Raising premiums substantially would only undermine the goal of extending affordable insurance to the near-poor.

2

The Growth in Oregon Medicaid Spending

The Oregon Health Plan was implemented in February 1994 to expand eligibility and coverage for health care while containing costs. This Medicaid managed care program largely revolves around three significant reforms: extending eligibility to uninsured residents with incomes below the poverty level (hereafter called the expansion population); moving all beneficiaries from fee-for-service to managed care; and using a prioritized list of health care services to define the benefit package. While often referred to as a rationing approach to allocating care, in practice this list actually expanded the number of covered services to include significant expansions in dental and mental health services among others. Under OHP, the State Office of Medical Assistance Programs contracts with managed care plans throughout most of the state to deliver these services on a capitated basis.

Program implementation took place in two phases: Phase I, which began in February 1994, enrolled the AFDC (now TANF), General Assistance, PLM,¹ and expansion populations in managed care. The state expected many of the expansion enrollees to be working adults without access to employer-based health insurance. Enrollment for the Phase II population, including SSI beneficiaries, foster children, and dually Medicare-Medicaid eligible beneficiaries, took place in February of 1995. Oregon was one of the first states to mandate the enrollment of these groups in managed care. Nonetheless, the state allowed

¹ This includes eligibility expansions to pregnant women, infants and children implemented from 1988 onward.

certain Phase II individuals to remain in the fee-for-service system if their complex care needs justified this step. Phase II also included the expansion of mental health benefits to all OHP beneficiaries. Prior to this reform, mental health services were only delivered to people identified as a threat to themselves or others. Beginning with a phase-in of capitated mental health benefits for 25 percent of state Medicaid beneficiaries in January of 1995, the mental health benefits became available to all eligibles in July of 1997. Together the expansion of the benefit package and extension of eligibility to thousands of low income Oregonians created fiscal challenges for Oregon's Medicaid program, as this chapter will show.

The following sections will examine trends in Medicaid enrollment, expenditures, and service use in Oregon over time and compared to other states. In order to compare spending and enrollment patterns prior to and following the implementation of OHP, this chapter will divide the analysis into pre and post OHP periods. The pre-OHP period consists of the years, 1991-1993, while the post-implementation period includes the years from 1994 to 1997.

Since the analysis will compare OHP and the Oregon Medicaid program in general, it is first necessary to clarify the services and beneficiaries included in OHP. Within OHP, most basic health care services are provided under capitation including hospital, physician, prescription drugs,² preventive care, dental care, and substance abuse and mental health services. Other covered Medicaid services are carved out of health plans and delivered on

Prescription drugs are capitated except for class 7 and 11 psychotropic medications which are reimbursed on a feefor-service basis.

a fee-for-service basis, including home and community based services, nursing home care, and miscellaneous other services. While these largely long-term care services are carved out of health plans, virtually all of their recipients are still enrolled in OHP for acute care services. Only a small number of people are considered ineligible for OHP, including some residents of state long term care facilities, Qualified Medicare Beneficiaries who receive only premium and cost-sharing benefits, and the Medically Needy. While the number of these non-eligible Medicaid beneficiaries is small, they comprise a significant portion of Medicaid services and expenditures. Therefore, for the purpose of this analysis, OHP will be treated as a sub-component of the overall Medicaid program including those eligible and ineligible for OHP.

This chapter is presented in six sections. Section 2.1 summarizes the sources and quality of data used in tracking eligibles and spending. Section 2.2 shows trends in eligibles and recipients over the 1991-97 period. This is followed in section 2.3 by trends in Oregon Medicaid spending, benchmarked first against national aggregate spending and then on a per eligible basis. Actual per eligible spending is also benchmarked against projected spending based on Cooper & Lybrand's actuarial models. Section 2.4 decomposes spending into feefor-service versus HMO categories while section 2.5 shows vendor payment trends by broad eligible category. Section 2.6 then presents yet another breakdown of spending between demonstration (i.e., OHP) and non-demonstration spending. The chapter concludes with a brief analysis of trends in non-medical administrative overhead costs.

2.1 Data Sources

2.1.1 Overview of HCFA-64 and HCFA 2082 Reports

The analyses in this chapter utilize state-reported data drawn primarily from two official HCFA sources: the Quarterly HCFA-64 expenditure report; and the HCFA-2082 that documents recipients, enrollees, and service use by demographic and eligibility groups. The publishers acknowledge certain inconsistencies within and between these data sets, largely due to the differences in payment information captured by the two reports. In addition, our analyses takes advantage of actuarial studies and financial reports funded or produced by the state of Oregon.

The HCFA-64 is a quarterly statement of expenditures for the Medicaid program that states submit to HCFA in electronic form 30 days following each quarter. The report functions primarily as an accounting statement of actual state expenditures submitted for federal reimbursement under Title XIX for each quarter of the Federal fiscal year. Each report details the expenditures by category of service or provider type, the recoupment made or refunds received, and income earned on grant funds. The report also includes lump sum payments such as capitation payments, health insurance, and payments to Disproportionate Share (DSH) hospitals. Since federal cost sharing is based on HCFA form 64 information, this information must be derived from solid source documents such as invoices, cost reports, and eligibility records.

In addition to documenting current expenditures, the HCFA-64 report is also used as a vehicle to reconcile under-or-overpayments from previous quarters made on the basis

of states' funding estimates filed prior to the beginning of each quarter. When states are unable to document expenditures on a current basis, federal matching expenditures are withheld until documentation is provided, usually in a subsequent period as a prior period adjustment. For instance, states may claim outstanding DSH payments up to capped amounts in the subsequent fiscal year.

The HCFA-2082 is the primary federal source of state-reported analytic data on Medicaid population characteristics and utilization. Published annually, the report provides state reported summary data on eligibility, service use, and vendor payments made during each fiscal year. It also breaks down and summarizes data for these eligibility categories by demographic divisions such as race, sex, and maintenance assistance status. Because states vary in their approaches to collecting and reporting this information, state-supplied Medicaid files are subjected to quality assurance edits to ensure that data are within acceptable error tolerance for the national report.

The data reported on the HCFA-2082 for a given year include the number of service recipients and the amount of payments for all claims adjudicated during the year by state claims processing systems. In contrast to HCFA-64, the HCFA-2082 documents services actually reimbursed during the year. In addition, since the HCFA-2082 is based on adjudicated claims, it does not include lump sum figures or adjustments for which no claims are filed. While HCFA-2082 includes capitation payments, these payments are not separated by eligibility category, and the amounts often differ from those listed on the HCFA-64. In addition, the HCFA-2082 captures no DSH payments since these lump sum payments are

not linked to specific claims. Consequently, most expenditures documented on the HCFA-2082 are limited to fee-for-service data from States' claims processing systems.

2.1.2 Inconsistencies Across Data Sources

As a result of different reporting procedures for the HCFA-2082 and HCFA-64 forms, payment information on both forms differs, often significantly. In particular, since the HCFA-64 report includes lump sum payments and adjustments, its expenditure figures are generally considered more reflective of actual spending. Yet, the HCFA-2082 remains a useful adjunct to the HCFA-64 data since it breaks down enrollment and vendor payments by eligibility and maintenance assistance status. Considering the need to examine expenditure and enrollment information our analysis will utilize HCFA-64 report data to provide summary expenditure information, and the HCFA-2082 report to obtain enrollment data by eligibility category. For OHP in particular, the analysis will also utilize state eligibility and enrollment reports to better capture average monthly enrollment in managed care.

In addition to the noted inconsistencies between the HCFA-2082 and HCFA-64 data on the national level, certain common problems also occur in these data sets on a state level, especially for 1115 waiver states. Following the implementation of its waiver in 1994, Oregon was required to significantly change its reporting procedures and formats on the HCFA-2082 and HCFA-64 forms. As a result, Oregon's HCFA-2082 and HCFA-64 data began to show some anomalies that complicate the evaluation of these data. The primary

problem in the Oregon data stems from new coding practices for the HCFA-2082 form. The 2082 features several summary tables that break down recipients, eligibles, and vendor payments by Maintenance Assistance Status. However, at the time Oregon implemented its waiver in 1994, no category existed to accurately capture the expansion population. To account for this population in 1994 and beyond, the state reported this group by unique Maintenance Assistance Status and Basis of Eligibility codes that were not consistent with the 2082. As a result, large numbers of beneficiaries and vendor payments are categorized as "MAS Unknown" in the data files released by HCFA between 1994 and 1996. For instance, enrollment in this "MAS Unknown" category on the HCFA-2082 form rose from zero in fiscal year 1993, to 101,000 in 1994, to 218,000 by 1996. It is clear that these MAS unknown eligibles are adults and children from the expansion population, but it is difficult to separate these groups into the proper 2082 categories for analysis.

Some adjustments to Oregon's data and recent changes in HCFA 2082 reporting formats have addressed this "MAS Unknown" problem. In particular, the Urban Institute reclassified the "MAS Unknown" group into the AFDC Adults and Children, and Poverty Related categories, but the results are somewhat inconsistent for years' 1995 and 1996. In 1997, HCFA made significant revisions to its 2082 form, adding a "Poverty related" category to its Maintenance Assistance Status categories. In the 1997 data, the "MAS Unknown" figure dropped to zero in Oregon, while 330,000 eligibles were reported in the new category. The appearance of the "MAS Unknown" numbers in the new poverty related category seems to confirm that this group is the expansion population.

2.1.3 Approaches to Reporting Anomalies

Taking noted data challenges into account, this analysis will make several efforts to minimize the impact of these anomalies. To control for the inconsistencies in the maintenance assistance categories on the 2082, our analysis will integrate corrected figures provided by the state whenever possible. The state supplied HCFA with an "Auxiliary HCFA 2082 Report" that breaks down the MAS unknown figures by category and age, enabling us to reach a more accurate picture of vendor payments and eligibility counts. The report will also supplement 2082 enrollment data with average monthly enrollment figures calculated from state monthly enrollment reports to provide aggregate enrollment and beneficiary data by category of service. We will also use the Urban Institute "Poverty-Related" figures to provide a time series of non-cash participation in OHP and Medicaid generally for both periods. Despite these adjustments, eligible counts for Oregon will be slightly understated in some years due to the inability to accurately allocate the MAS population into adults and children. In addition, due to noted anomalies in the 1997 data, we chose to focus on the adjusted data through 1996 for some analyses.

With regard to expenditures, the report will support the HCFA-64 with information from Oregon submitted "HCFA-64.9 Waiver Supplements", that separate expenditures for the waiver by eligibility category. The analysis will use this HCFA-64.9 Waiver Supplement data along with aggregate state and national HCFA-64 data to determine waiver-related costs relative to expected costs and national figures. In addition, the report will use the Coopers and Lybrand Per Capita Cost estimates published in 1994 to provide a baseline estimate to

measure against actual program costs. Since expenditure data are relatively accurate and up to date, the report will use data for years between fiscal years 1991 and 1997.

2.1.4 State Eligibility/Enrollment Files

In addition to HCFA data sources, the report also utilizes information from Oregon's monthly eligibility reports to generate average monthly OHP enrollment by eligibility category.

2.2 Trends in Eligibles: 1991-1996

This section will discuss trends in enrollment and service utilization for the Oregon Health Plan and the overall Medicaid program both on a state and national level. For purposes of the discussion, eligibles (also called enrollees) are defined as unduplicated individuals enrolled in Medicaid for any length of time in state eligibility files during the federal fiscal year. While the 1997 HCFA 2082 data are available, both HCFA and state representatives agreed that the data were seriously flawed. Therefore, eligibility analysis using this data source will omit 1997 data.

Table 2-1 shows the total number of Medicaid program eligibles for the Oregon and the nation, along with a separate break down by maintenance assistance status and eligibility group, with the annual compound growth rates listed by time period. In the first panel, eligibles are divided into four major groups that correspond approximately with phase I and phase II of OHP. The Adults and Children under 21 categories include both categorically

Table 2-1

Medicaid Eligibles by Maintenance Assistance Status:
Oregon and The Nation: Federal Fiscal Years 1991-1996

							Compo	und Grow	th Rate
	<u>1991</u>	1992	1993	<u>1994</u>	<u>1995</u>	1996	1991-93	1993-96	1991-96
ELIGIBLES									
Oregon	302,664	334,918	365,887	454,484	485,222	472,948	9.5%	8.6%	8.9%
Adults	85,095	88,734	93,125	164,247	227,015	224,497	4.5%	29.3%	19.4%
Children<21	155,089	174,579	192,457	206,535	170,000	158,759	10.8%	-6.4%	0.5%
Elderly	28,795	31,958	34,301	36,764	40,632	41,230	8.7%	6.1%	7.2%
Blind and Disabled	33,685	39,647	46,004	46,938	47,575	48,462	15.6%	1.7%	7.3%
Nation	32,295,974	35,754,420	38,808,180	40,893,904	41,711,000	41,296,796	9.2%	2.1%	4.9%
Adults	7,518,289	8,323,966	8,973,946	9,498,890	9,622,347	9,224,991	8.8%	0.9%	4.1%
Children <21	16,841,601	18,784,342	20,416,811	21,333,151	21,616,912	21,270,470	9.6%	1.4%	4.7%
Elderly	3,575,905	3,771,136	3,945,835	4,075,341	4,104,400	4,103,184	4.9%	1.3%	2.8%
Blind and Disabled	4,360,180	4,874,976	5,471,589	5,986,521	6,367,341	6,698,151	11.4%	6.7%	8.6%

Cash Assistance and N	on Cash Assistaı	nce Eligibles					Compo	ound Growt	th Rate
	<u>1991</u>	1992	1993	<u>1994</u>	1995	<u> 1996</u>	1991-93	1993-1996	1991-96
Oregon	302,664	334,918	365,887	454,484	485,222	472,948	9.5%	8.6%	8.9%
Cash Assistance	189,819	205,559	209,288	208,746	181,564	172,706	4.9%	-6.4%	-1.9%
Non-Cash	63,851	64,367	75,349	77,232	87,611	81,138	8.3%	2.5%	4.8%
Poverty-Related	48,994	64,992	81,250	168,506	216,047	219,104	25.3%	33.1%	30.0%
Nation	32,295,974	35,754,420	38,808,180	40,893,904	41,711,000	41,296,796	9.2%	2.1%	4.9%
Cash Assistance	20,684,695	22,122,535	23,321,565	23,809,934	23,405,415	22,442,674	6.0%	-1.3%	1.6%
Non-Cash	8,208,684	9,282,077	10,230,603	10,663,938	10,931,788	11,022,408	11.0%	2.5%	5.9%
Poverty-Related	3,402,595	4,349,807	5,256,012	6,420,032	7,373,797	7,831,714	21.7%	13.3%	16.7%

NOTES:

The number of children enrolled in the program or receiving services is understated for the years 1994-1997. The Urban Institute reconciliations of 2082 data allocated enrollees listed as "unknown" into the proper adult and children categories, reflecting enrollment expansions in OHP. Nonethelesss, 1997 data still show 12,000 enrollees listed in this MAS unknown category. The Poverty-Related category is a combination of medically needy and other enrollees normally above the traditional eligibility threshold. Noted inconsistencies in Oregon's reporting of eligibles and recipients in the FY 1997 data led to the decision to remove these data from the analysis.

SOURCE: Urban Institute adjusted reports of HCFA 2082 data and HCFA unadjusted 2082 data.

eligible and expansion populations for OHP and provide some useful comparison with the national figures for these categories. The Elderly and Blind and Disabled categories correspond with phase II of OHP.

The Cash and Non-Cash figures in the second panel were developed by the Urban Institute to show the growth of traditional AFDC eligibles relative to the non-cash assistance population. The Cash Assistance eligibles include people categorically eligible for Medicaid by receipt of cash assistance such as AFDC, SSI, SSI state supplements, and adoption or foster care assistance. In contrast, the non-cash recipients include categorically needy groups such as the medically needy and aliens receiving emergency assistance, aged, blind, and disabled, pregnant women and children, and others categorically needy but not eligible for cash assistance. These Non-Cash figures may also serve as a rough proxy for the expansion population in Oregon to provide some comparison of Oregon and national Non-Cash population figures. The table makes use of HCFA data adjusted by the Urban Institute to incorporate the "MAS unknown" enrollees reported on Oregon's HCFA-2082 forms into the Adult or Children categories. Given the significant decline in the number of Children under 21 in 1995 and 1996, it is likely that the Urban Institute's algorithms for splitting adults and children were problematic in some years. It is also likely that the state underreported children in its 2082 reports for those years, since the national numbers for eligible children grew modestly over this period.

Eligibility trends in the pre-OHP period (1991-93) for the nation and Oregon demonstrate similar annual compound rates of growth of 9.2 percent versus 9.5 percent,

respectively. National enrollment growth outpaced Oregon among AFDC adult enrollees. In contrast, Oregon enrollment grew relatively faster in the pre-OHP period among the elderly, blind and disabled.

During the post-OHP period, 1994-1996, Oregon's overall enrollment trend diverged sharply from national growth trends. While enrollment growth on a national level slowed to 2.1 percent annually over this period, enrollment in Oregon's Medicaid program grew four times as fast, at a rate of 8.6 percent annually. This enrollment growth coincides with the implementation of OHP, which extended eligibility to over 100,000 new individuals who were not previously eligible for Medicaid.

Oregon's Medicaid program also diverged from national trends within eligibility groups. Oregon's enrollment in the blind and disabled category slowed dramatically, falling from 15.6 to 1.7 percent annually, while enrollment for this group nationwide only slowed from 11.4 to 6.7 percent. In contrast, Oregon's enrollment of adult eligibles increased sharply to 29.3 percent annually (due to its eligibility expansion), while adult enrollment remained stable nationwide during this period. Among elderly eligibles, Oregon also surpassed national growth at a rate of 6.1 versus 1.3 percent. However, a curious pattern emerges among children enrolled in Medicaid. While child enrollment nationwide rose modestly at 1.4 % over this period, Oregon posted a decline of 6.4 percent. Since many of the children eligible for OHP were probably enrolled prior to the program through the Medicaid eligibility expansions of the late 1980s, the state expected only modest growth in new child enrollment. (It is important to note that the SCHIP program intended to serve low-

income children, had not been enacted during this time period.) Nevertheless, this drop in child eligibles relative to the nation warrants some concern and supports claims that Oregon may have had problems reporting child eligibles. It is likely that significant numbers of children in 1996 were inadvertently classified as adults. Despite these problems, on net, Oregon experienced an increase in roughly 100,000 adult and child enrollees between 1993 and 1996.

Among the Cash and Non-Cash eligibles, other significant patterns emerged over the 1993-96 period. Oregon's number of eligibles on cash assistance declined at more than four times the national rate (presumably due to state welfare reform implemented in 1994). At the same time, the number of Non-Cash eligibles increased by 21.7 percent annually in Oregon, compared to 6.6 percent in the nation. This very high growth rate among Non-Cash eligibles in Oregon is consistent with the eligibility expansions to low income families under OHP. These figures also indicate a marked shift in the Oregon Medicaid program toward more broadly serving low-income families instead of recipients of cash assistance. As a result, under current national welfare reform pressure, many former AFDC recipients may be able to retain OHP coverage, despite losing their AFDC eligibility.

State enrollment reports further demonstrate how OHP affected the overall composition of the Medicaid program in Oregon. Table 2-2 shows the growth in average monthly eligibles by phase I and II enrollment groups, in order to illustrate the program composition of OHP by traditional enrollees and the expansion population. Among Phase

Table 2-2

Growth in Annual Number of OHP Eligibles in OHP

Calendar Years 1994-1998

OHP Eligibility Groups

	Phase I E	lligibles		Phase II	Eligibles	Total	ОНР
nditional _	%OHP Eligibles	OHP Expansion	%OHP Eligibles	All	%OHP Eligibles	Total <u>Eligibles</u>	% Growth Eligibles
82,273	72.8%	68,089	27.2%	0	NA	250,362	
88,968	51.0%	120,866	32.6%	72,458	19.6%	370,215	32.4%
77,638	49.0%	108,874	30.0%	75,800	20.9%	362,312	-2.2%
66,963	48.4%	100,333	29.1%	77,839	22.6%	345,134	-5.0%
67,317	49.9%	86,944	25.9%	80,786	24.1%	335,047	-3.0%
	aditional – 82,273 88,968 77,638 66,963 67,317	Eligibles 82,273 72.8% 88,968 51.0% 77,638 49.0% 66,963 48.4%	Additional Eligibles Expansion 82,273 72.8% 68,089 88,968 51.0% 120,866 77,638 49.0% 108,874 66,963 48.4% 100,333	Additional Eligibles Expansion Eligibles 82,273 72.8% 68,089 27.2% 88,968 51.0% 120,866 32.6% 77,638 49.0% 108,874 30.0% 66,963 48.4% 100,333 29.1%	Additional Eligibles Expansion Eligibles All 82,273 72.8% 68,089 27.2% 0 88,968 51.0% 120,866 32.6% 72,458 77,638 49.0% 108,874 30.0% 75,800 66,963 48.4% 100,333 29.1% 77,839	Additional Eligibles Expansion Eligibles All Eligibles 82,273 72.8% 68,089 27.2% 0 NA 88,968 51.0% 120,866 32.6% 72,458 19.6% 77,638 49.0% 108,874 30.0% 75,800 20.9% 66,963 48.4% 100,333 29.1% 77,839 22.6%	Additional Eligibles Expansion Eligibles All Eligibles Eligibles 82,273 72.8% 68,089 27.2% 0 NA 250,362 88,968 51.0% 120,866 32.6% 72,458 19.6% 370,215 77,638 49.0% 108,874 30.0% 75,800 20.9% 362,312 66,963 48.4% 100,333 29.1% 77,839 22.6% 345,134

NOTES:

Totals for each OHP eligible group reflect average members per month for 12 months.

The totals for 1998 reflect average members per month for a 10 month period.

SOURCE: Oregon OHP monthly enrollment reports, OMAP, 1994-1998.

I, the number of eligibles from the traditional AFDC and SOBRA populations show a steady decline in number and overall percentage within OHP. Concurrently the OHP expansion population grew to an average of 29 percent of all OHP enrollees over this period. The Phase II enrollees remain at about 20-25 percent of overall eligibles. This marked decline in traditional eligibles along with the concurrent increase in both the number and percentage of expansion enrollees further indicates that OHP is shifting more toward a program comprised of the working poor.

2.3 Trends in Medicaid Spending: 1991-1997

2.3.1 Trends in Oregon Versus National Aggregate Spending

Table 2-3 shows total current expenditures for the national and Oregon Medicaid programs for the pre-OHP and post-OHP years, broken down by funding source. Over the 1991-97 period, total current medical assistance payments nationwide rose 83 percent, from \$88.4 billion to \$160.5 billion, at a continuous compound growth rate of 9.9 percent. Concurrently, the federal share of these payments rose 9.8 percent annually, from \$50 to \$91 billion, while the state share rose at 10.1 percent annually, from \$38 to \$70 billion. Despite the almost 10 percent annual growth rate, the federal share of Medicaid spending was almost constant over the 1991-1997 period, falling less than 1 percentage point from 57.1 to 56.6 percent. Thus, the growth in federal spending tracked total Medicaid spending due to a relatively unchanged FMAP.

Table 2-3

Total Current Medicaid Expenditures in Oregon and the Nation FFY 1991-1997 (000s)

						_	Compound Growth Rate			
ATION	<u>1991</u>	<u>1992</u>	<u>1993</u>	<u>1994</u>	<u>1995</u>	<u>1996</u>	<u>1997</u>	<u>1991-97</u>	<u>1991-93</u>	1993-1997
	000 277 772	¢114.265.015	¢127, 572, 129	¢127 007 277	¢151 707 200	¢154 422 072	¢1.60.520.571	0.00/	10.00/	5.00/
Total	\$88,377,773	\$114,365,915	\$126,573,138	\$136,886,366	\$151,707,290	\$154,423,973	\$160,538,571	9.9%	18.0%	5.9%
Federal	\$50,475,739	\$65,808,335	\$72,568,820	\$78,494,472	\$86,493,768	\$87,920,235	\$90,937,760	9.8%	18.2%	5.6%
State	\$37,902,034	\$48,557,580	\$54,004,318	\$58,391,894	\$65,213,522	\$66,503,738	\$69,600,811	10.1%	17.7%	6.3%
FMAP	0.571	0.575	0.573	0.573	0.570	0.569	0.566			
REGON										
Total	\$660,230	\$804,777	\$955,605	\$1,104,777	\$1,437,686	\$1,531,826	\$1,544,062	14.2%	18.5%	12.0%
Total-exp*	\$660,230	\$804,777	\$955,605	\$1,037,881	\$1,179,235	\$1,302,426	\$1,325,918	11.6%	18.5%	8.2%
Federal	\$420,194	\$513,082	\$597,740	\$687,997	\$898,127	\$936,483	\$935,793	13.3%	17.6%	11.2%
Federal-exp*				\$646,600	\$737,022	\$795,782	\$803,506	10.8%		7.4%
State	\$240,035	\$291,695	\$357,865	\$416,780	\$539,559	\$595,343	\$608,269	15.5%	20.0%	13.3%
State-exp*				\$391,281	\$442,213	\$506,644	\$522,412	13.0%		9.5%
FMAP	0.636	0.638	0.626	0.623	0.625	0.611	0.606			

NOTES:

FMAP expressed as a ratio of current federal share to total current expenditures for the period.

Compound growth rate: Based on continuous compound formula = $1_n(\$_t/\$_{t-n})/n$.

SOURCE: Quarterly HCFA 64 Forms, HCFA Financial Management Reports, Federal fiscal years 1991-1997.

Total current expenditures do not include final adjustments from previous quarters and therefore are a reasonably accurate account of Medicaid billings during the Fiscal Year

^{*} Total -exp = Total Expenditures minus the expenditures for the expansion population formerly ineligible for Medicaid prior to OHP.

National trends showed dramatic reductions in the rate of expenditure growth during the post-OHP period, as Medicaid expenditure growth declined from a continuously compounded rate of 18.0 percent in the 1991-93 period to a rate of 5.9 percent annually during the 1994-97 period. Oregon's spending pattern, while largely consistent with national trends in the pre-OHP period, diverges noticeably over the 1993-97 post-OHP period (see Table 2-3). During the post-OHP period, Oregon's 12 percent annual rate of increase, while considerably less than 18.5 percent rate early in the decade, was still double the national average rate of growth. Removing the additional expenditures on the OHP expansion population (taken from column 2, Table 3-9 below), Oregon's spending growth averaged 8.2 percent, or about 40 percent above the national average for 1993-97.

The official federal share of total current expenditures in Oregon declined during the post-OHP period, from .636 in 1991 to .606 in 1997, as the state's economy improved. This three-percentage point decline in the federal share indicates a higher state burden of Medicaid expenditures than before the implementation of OHP. Federal Medicaid spending in Oregon post-OHP rose 11.2 percent annually, or 7.4 percent after removing OHP expansion expenditures. State spending in the post-OHP period averaged 13.3 percent annually, a rate considerably below the 20 percent figure in the early 1990's. Removing OHP expansion spending, the rate falls even more to 9.5 percent.

An estimate of the impact of the declining FMAP in Oregon on federal-state spending can be derived by multiplying the 1993 FMAP times 1997 total spending. Federal spending would have been \$30.8 million more in 1997 with an unchanged FMAP, and vice-

versa, the state would have spent \$30.8 million less. The post-OHP federal growth rate would have been 12.0 percent instead of 11.2 percent while the state rate would have been "only" 12.0 versus 13.3 percent. The declining FMAP caused the state to incur 5 percent more in 1997 than if its FMAP had not changed. On the other hand, the state's per capita income grew faster than the national average, easing the burden of a declining federal contribution.

Despite this mildly reduced FMAP, Oregon earned a federal match for a number of services that were formerly covered solely by the state, or not covered at all by the Medicaid program prior to OHP. While the prioritized list placed services on a continuum according to their necessity, it nonetheless significantly expanded the richness of the Medicaid benefit prior to OHP, including such benefits as mental health and dental services. In particular, prior to OHP, mental health services were entirely the fiscal responsibility of the state. Although the state continues to fund a portion of these services, OHP has significantly increased the federal funding and broadened coverage under OHP. In addition, by expanding eligibility to low income working poor, the state was able to shift a substantial portion of uncompensated health care costs under the Medicaid system. Together this richer benefit package and larger base of coverage served to increase the number of services funded by the federal government, despite mildly decreasing FMAP over the period of the demonstration.

In addition to viewing Oregon's expenditure growth against the nation, it is also useful to see where the state's spending falls relative to other states over the post OHP period. Table 2-4 shows the total current Medicaid expenditures and annual compound

Table 2-4

Growth in Medicaid Total Current Expenditures: All States Federal Fiscal Years 1993-97

			Growth FFY 1993	3-1997
States	<u>1993</u>	<u>1997</u>	<u>Dollars</u>	ACGR ¹
NEW HAMPSHIRE	\$417,626,588	\$731,879,670	\$314,253,082	14.0 %
NEW MEXICO	571,200,107	945,547,063	374,346,956	12.6
HAWAII*	380,667,552	628,742,323	248,074,771	12.5
DELAWARE*	252,993,304	409,213,692	156,220,388	12.0
OREGON*	955,605,171	1,544,061,944	588,456,773	12.0
NORTH CAROLINA	2,896,330,493	4,529,992,284	1,633,661,791	11.2
VERMONT*	255,476,326	368,558,764	113,082,438	9.2
IDAHO	293,674,092	423,261,391	129,587,299	9.1
WYOMING	134,792,803	194,261,299	59,468,496	9.1
PENNSYLVANIA	5,612,713,551	8,075,706,681	2,462,993,130	9.1
MISSISSIPPI	1,196,474,521	1,702,265,458	505,790,937	8.8
MISSOURI *	2,251,605,688	3,142,586,502	890,980,814	8.3
COLORADO	1,091,709,075	1,523,356,381	431,647,306	8.3
MARYLAND*	1,960,418,823	2,706,411,626	745,992,803	8.1
WASHINGTON	2,316,479,855	3,197,051,126	880,571,271	8.1
KENTUCKY*	1,863,697,039	2,571,547,988	707,850,949	8.0
MASSACHUSETTS*	4,044,060,493	5,509,187,324	1,465,126,831	7.7
TEXAS	7,118,557,512	9,600,126,934	2,481,569,422	7.5
ALABAMA*	1,637,241,543	2,201,307,097	564,065,554	7.4
UTAH	477,623,913	626,662,383	149,038,470	6.8
ILLINOIS	4,981,454,368	6,503,829,004	1,522,374,636	6.7
FLORIDA*	4,948,988,085	6,447,889,401	1,498,901,316	6.6
NEBRASKA	564,169,198	731,656,067	167,486,869	6.5
CONNECTICUT	2,274,592,089	2,932,104,706	657,512,617	6.3
TENNESSEE*	2,675,390,349	3,434,971,957	759,581,608	6.2
GEORGIA	2,798,657,494	3,584,015,676	785,358,182	6.2
SOUTH CAROLINA	1,682,379,478	2,152,056,132	469,676,654	6.2
IOWA	987,199,766	1,262,327,643	275,127,877	6.1
ARIZONA*	1,365,046,039	1,740,017,249	374,971,210	6.1
MICHIGAN	4,362,643,528	5,560,326,710	1,197,683,182	6.1
MAINE	855,860,127	1,090,325,858	234,465,731	6.1
ARKANSAS*	1,031,148,230	1,313,630,245	282,482,015	6.1
VIRGINIA	1,791,773,310	2,274,509,097	482,735,787	6.0
MINNESOTA*	2,167,024,589	2,746,987,575	579,962,986	5.9
SOUTH DAKOTA	266,293,718	331,629,892	65,336,174	5.5

Table 2-4 (continued)

Growth in Medicaid Total Current Expenditures: All States Federal Fiscal Years 1993-97

			Growth FFY 1993	3-1997
States	1993	1997	Dollars	ACGR ¹
OHIO*	5,179,121,147	6,443,156,403	1,264,035,256	5.5 %
ALASKA	295,383,607	364,110,087	68,726,480	5.2
NORTH DAKOTA	269,674,763	331,970,747	62,295,984	5.2
NEW YORK *	19,980,837,802	24,525,116,698	4,544,278,896	5.1
WISCONSIN	2,114,971,454	2,573,586,437	458,614,983	4.9
MONTANA	323,271,392	392,064,609	68,793,217	4.8
CALIFORNIA	13,538,038,074	16,240,099,854	2,702,061,780	4.5
NEW JERSEY	4,706,049,166	5,478,127,337	772,078,171	3.8
DC	686,719,058	796,084,288	109,365,230	3.7
KANSAS	889,665,598	1,028,739,139	139,073,541	3.6
NEVADA	423,447,106	489,276,626	65,829,520	3.6
RHODE ISLAND*	829,025,974	917,489,179	88,463,205	2.5
OKLAHOMA*	1,089,729,560	1,195,881,195	106,151,635	2.3
WEST VIRGINIA	1,200,411,773	1,193,977,808	-6,433,965	-0.1
INDIANA	2,815,525,345	2,493,114,385	-322,410,960	-3.0
LOUISIANA	3,493,823,048	3,055,407,383	-438,415,665	-3.4
US Totals	\$126,317,265,677	\$160,256,209,314	\$33,938,943,637	5.9
Average Growth in Do	ollars			
United States		\$665,469,483		
Oregon		\$588,456,773		
1115 Waiver States(Ore	gon excluded)	\$846,483,687		
Average Compound G	rowth Rate			
United States		5.9%		
Oregon		12.0%		
All Other Waiver States	(Oregon excluded)	6.9%		

NOTES

SOURCE: Quarterly HCFA 64 Forms, HCFA Financial Management Reports, 1991-1997.

^{*} indicates states with 1115 Waivers.

ACGR is the Annual Compound Growth Rate

growth rates for all 50 states and the District of Columbia, ranked from fastest to slowest expenditure growth. The table also identifies states (marked by asterisk) with implemented 1115 waiver programs.³ The summary figures at the bottom show the average nominal dollar growth and average compound growth rates for the US, Oregon, and other waiver states. Within this context, Oregon ranks fifth highest overall in its compound Medicaid expenditure growth between 1993-97. Among the top five growth states, three are currently operating 1115 waivers of roughly the same duration as Oregon. Coincidentally, these three waiver states share growth rates hovering, between 12.0 and 12.5. In contrast, the two fastest growing states had no such waivers. Further, these states shed little light on the role of managed care in rising expenditures. While New Hampshire has one of the lowest Medicaid managed care penetration rates, at 10 percent, New Mexico is a high managed care state, with a penetration rate of 78 percent.⁴

Among all the waiver states, Oregon had twice the average compound spending growth rate, but a much lower total spending increase. This is largely explained by the small size of Oregon's program relative to other waiver states.

The comparison of waiver states is very rough, since these states differ significantly in the amount of time they have been operating their waivers. In addition, while all states with 1115 waiver demonstrations have implemented a shift to managed care, not all of these states have expanded Medicaid eligibility.

http://www.hcfa.gov/medicaid/mcsten98.htm HCFA cited elsewhere as State Managed Care Enrollment report, June 1998.

2.3.2 Trends in Oregon Per Capita Spending: 1995-1997

The state of Oregon's budget neutrality commitment was based on a per capita model developed by Coopers & Lybrand. This model projected spending by three groups: current categorical eligibles, expansion eligibles, and Phase II eligibles. Within these categories, Coopers & Lybrand made separate estimates of per capita utilization and cost per unit of service based on expected characteristics and health care service patterns. Costs were then trended forward using service-specific inflation factors and used to set capitation rates for the differing populations and to define federal budget neutrality under the OHP waiver. Coopers has continually refined its cost projections, which have been used to develop capitation rates for the OHP. However, this discussion will focus exclusively on the initial per capita cost projections published in 1994 as an addendum to the State's waiver terms and conditions. These initial projections specified the expected per capita costs for each enrollment group through 1997. Assessing the computed per capita costs against these expected costs will yield some insights about how accurately Coopers predicted Medicaid expenditures.

Table 2-5 shows a breakdown of the expected per capita costs for OHP members by eligibility group according to Coopers & Lybrand forecasts, along with the actual per capita costs calculated using HCFA-64 enrollment data from OMAP and expenditure data form

As part of the waiver approval process, states are apprized of the terms and conditions under which they may operate their programs. These Terms and Conditions documents are sent to states and serve as a means of specifying contractual obligations.

Table 2-5

Expenditures per OHP Eligible, by Eligibility Category, Calendar Years 1994-1997

			Eligibilit	y Group				
	Tradi Elig		ОНР Ех	pansion	Phas	se II	Overall .	Average
Calendar Year	C&L <u>Estimate</u>	Actual Per <u>Capita</u>	C&L <u>Estimate</u>	Actual Per <u>Capita</u>	C&L <u>Estimate</u>	Actual Per <u>Capita</u>	C&L <u>Estimate</u>	Actual Per <u>Capita</u>
1995	\$2,067	\$1,569	\$1,521	\$2,192	\$5,021	\$4,080	\$2,568	\$2,182
1996	\$2,232	\$1,752	\$1,561	\$2,035	\$5,487	\$4,534	\$2,719	\$2,419
1997	\$2,423	\$1,824	\$1,726	\$2,198	\$5,985	\$4,749	\$3,055	\$2,569
Compound Growth Rate	7.9%	7.5%	6.3%	0.1%	8.8%	7.6%	8.7%	8.2%

NOTES:

C&L Figures are Coopers & Lybrand per capita cost estimates for each member per month, multiplied by 12.

Actual per capita costs: total OHP expenditures divided by average monthly enrollment by category.

Overall average represents a weighted average of individual eligibility groups using C&L monthly eligible proportions in each group as weights.

Coopers & Lybrand figures for 1995 and 1996 include estimates for the addition of chemical dependency and mental health services.

Since mental health services were only implemented for a small portion of the population, estimates may be slightly higher than actual figures.

SOURCE: OHP enrollment and HCFA 64 quarterly reports; Coopers and Lybrand Per Capita Estimates taken from the HCFA terms and conditions of the OHP waiver.

"Monitoring Budget Neutrality for the Oregon Reform Demonstration"; Attachment 2: "Demonstration Per Capita Cost." 28 September 1994

¹⁹⁹⁴ data are not available for C&L per capita figures.

reports.⁶ Among the traditional Medicaid eligibles, actual per capita costs remained well below Coopers & Lybrand's estimates for all years, a difference of \$526 per enrollee per year. The same proved true for the Phase II population, who averaged about \$1000 less per enrollee than expected. In contrast, the cost for the expansion population surpassed projections by an average of \$500 per enrollee per year, or by about one-third over the estimated per capita costs.

The underestimate of per capita costs for the expansion population may be due to several factors. Some of the added costs may be due to unanticipated pent-up demand for services among this population, resulting in higher-than-expected use rates. In addition, selection bias may have played a significant role in inflating expenditures, as many expansion enrollees joined the plan while sick, only to disenroll shortly thereafter. The Coopers & Lybrand methodology may also have produced unrealistically low projections due to the (unavoidable) use of a privately insured population to forecast medical needs of the near-poor population in Oregon. State representatives also add that the Coopers and Lybrand forecasts may have been unrealistically high for the traditional population since they included estimates of service costs for mental health and chemical dependency services. Chemical dependency services were added to the OHP benefit package in January 1995. While mental health services were added for 25% of the OHP population in 1995, benefits were not implemented for all OHP enrollees until July 1996.

⁶ It is unclear if Coopers forecasts are intended to reflect net or total current expenditures per enrollee. We have used total current expenditures which lack prior period adjustments and may therefore slightly under or overstate the per capita amounts.

Regardless of the factors responsible, on an eligible-weighted basis, the Coopers & Lybrand cost estimates systematically over-predicted actual overall expenditures on a per eligible basis by roughly 15 percent. Trend factors used by Coopers and Lybrand, however, tracked actual spending growth quite closely (i.e., 8.7 versus. 8.2 percent.)

Table 2-6 shows national and Oregon trends in total and per eligible per unduplicated enrollee for the fiscal year while OHP data are on a per member per month basis (and thus represent somewhat fewer enrollees). Over the 1991-96 period, Oregon Medicaid spending per unduplicated eligible rose 7.9 percent annually versus 6.2 percent in the nation as a whole. Total Medicaid spending in Oregon in the pre-OHP base period grew at the same 18-18.5 percent annual rate as nationally. Oregon's annual rate in the post-OHP era, 1994-96, fell only marginally to 15.7 percent annually while, nationally, the annual rate fell by almost two-thirds. Differences in per capita trends is evident in the post-OHP period when Oregon experienced 7.2 percent average annual growth in per capita expenditures versus 4.6 percent nationally.

Total spending growth can be decomposed into two factors: (1) the proportion explained by the growth in per capita expenditures, versus (2) the growth in eligibles. Over the entire 1991-1996 period, increases in unduplicated eligibles in Oregon contributed 53 percent to expenditure growth. In contrast, on a national level, growth in eligibles contributed 44 percent to the growth in total current spending. Thus, even before OHP, Oregon's higher annual Medicaid spending growth relative to the nation was being driven by expanded eligibility coverage. With the advent of OHP, Oregon simply maintained its

Table 2-6
National and Oregon Total Current and Per Eligible Expenditures, 1991-1996 (000s)

	Federal Fiscal Years 1991-1996							und Grow	th Rate
	<u>1991</u>	<u>1992</u>	<u>1993</u>	<u>1994</u>	<u>1995</u>	<u>1996</u>	<u>1991-96</u>	<u>1991-93</u>	<u>1993-96</u>
Total Current Expenditures									
Nation	\$88,377,773	\$114,365,915	\$126,573,138	\$136,886,366	\$151,707,290	\$154,423,973	11.2%	18.0%	6.6%
Oregon	\$660,230	\$804,777	\$955,605	\$1,104,777	\$1,437,686	\$1,531,826	16.8%	18.5%	15.7%
OHP	NA	NA	NA	\$222,496	\$718,391	\$868,319	NA	NA	68.1%
Annual Per Eligible Expenditures	2								
Nation	\$2,745	\$3,210	\$3,265	\$3,381	\$3,665	\$3,748	6.2%	8.7%	4.6%
Oregon	\$2,179	\$2,402	\$2,611	\$2,433	\$2,964	\$3,239	7.9%	9.0%	7.2%
OHP	NA	NA	NA	\$927	\$2,094	\$2,340	NA	NA	46.3%

NOTES:

Oregon enrollment and expenditure information are displayed by Federal Fiscal Year to align them with Federal statistics.

Due to anomalies in the Oregon 2082 eligible data, authors chose not to show FY 1997 data

SOURCES: Eligibility data from HCFA 2082, table 18, various years. Expenditure data from HCFA 64, table 1. OHP enrollment information from OMAP monthly enrollment reports.

high annual eligibility expansion rate of 8.5-9 percent, while national enrollment expansion fell to about 2 percent. Consequently, while other states as a whole still spend more per eligible (see Table 2-6), the gap has closed from 26 percent in 1991 to 16 percent in 1996.

Oregon's per eligible spending relative to other states is also illustrated in Table 2-6a. Table 2-6a ranks states by their growth in average annual per capita expenditures over the 1994-96 post-OHP period. Two states are excluded due to missing data. Among the states represented, Oregon ranked higher than the national average at 7.2 percent annually versus a national average of 4.5 percent. Only nine states, including two waiver states, Alabama and Ohio, displayed a higher average growth rate over this period. Compared with all states with 1115 waivers, Oregon's average annual rate of expenditure growth per eligible was a 3.3 percentage points higher over this period. On balance, Oregon's per eligible expenditures increased over \$150 more in absolute terms than the national average and more than \$200 hundred dollars more than the waiver state average.

Its higher recent expenditure growth notwithstanding, Oregon remains well below national average per eligible spending. Oregon's \$3,239 per eligible amount in 1996 is almost \$500 below the national average, and the state ranked 33rd in spending out of 48 reporting states. Even among comparable waiver states, Oregon incurred substantially lower per eligible expenditures.

Table 2-6a

Ranking of State Growth in Per Eligible Expenditures from FFY 1993-1996

			Grov	vth in
_	Per El	ligible	Per eligible	Expenditures
States	1993	1996	Absolute	ACGR ¹
DC	\$1,771	\$4,315	\$2,544	29.7%
NEW HAMPSHIRE	4,878	7,725	2,847	15.3
MISSISSIPPI	2,100	2,896	796	10.7
ALABAMA*	2,495	3,257	762	8.9
WYOMING	2,531	3,294	763	8.8
OHIO*	3,180	4,070	890	8.2
NORTH CAROLINA	2,919	3,659	739	7.5
IOWA	3,143	3,905	762	7.2
PENNSYLVANIA	3,406	4,226	820	7.2
OREGON*	2,612	3,239	627	7.2
MARYLAND*	3,446	4,269	823	7.1
FLORIDA*	2,231	2,761	530	7.1
COLORADO	3,087	3,812	725	7.0
NEW MEXICO	2,166	2,644	478	6.6
MASSACHUSETTS*	5,181	6,306	1,125	6.5
NORTH DAKOTA	3,866	4,703	837	6.5
MICHIGAN	3,046	3,700	653	6.5
UTAH	2,497	3,030	532	6.4
WISCONSIN	3,318	4,019	700	6.4
TEXAS	2,670	3,204	534	6.1
ARKANSAS*	2,768	3,308	539	5.9
NEBRASKA	3,238	3,866	628	5.9
NEW YORK *	6,436	7,577	1,140	5.4
MAINE	4,374	5,142	769	5.4
MISSOURI *	3,188	3,698	510	5.0
ILLINOIS	2,861	3,287	427	4.6
MONTANA	3,273	3,745	472	4.5
IDAHO	2,567	2,936	369	4.5
SOUTH DAKOTA	3,370	3,853	483	4.5
MINNESOTA*	4,017	4,559	542	4.2
VERMONT*	2,837	3,216	379	4.2
KENTUCKY*	2,799	3,159	361	4.0
SOUTH CAROLINA	3,302	3,692	390	3.7

Table 2-6a (continued)

Ranking of State Growth in Per Eligible Expenditures from FFY 1993-1996

			Grov	vth in
_	Per El	igible	Per eligible	Expenditures
<u>States</u>	<u>1993</u>	<u>1996</u>	<u>Absolute</u>	ACGR ¹
WASHINGTON	3,145	3,469	324	3.3
ARIZONA*	2,204	2,423	219	3.2
CALIFORNIA	2,090	2,297	207	3.2
NEW JERSEY	5,509	6,021	512	3.0
GEORGIA	2,636	2,860	224	2.7
VIRGINIA	2,711	2,920	209	2.5
CONNECTICUT	6,424	6,904	480	2.4
ALASKA	3,598	3,825	226	2.0
KANSAS	3,270	3,443	173	1.7
OKLAHOMA*	2,488	2,612	124	1.6
LOUISIANA	4,508	4,254	-254	(1.9)
INDIANA	4,659	4,262	-397	(3.0)
WEST VIRGINIA	2,806	2,542	-264	(3.3)
TENNESSEE*	2,557	2,249	-308	(4.3)
RHODE ISLAND*	6,051	5,156	-894	(5.3)
NEVADA	3,783	3,205	-578	(5.5)
US Averages	3,237	3,707	470	4.5
Oregon	2,612	3,239	627	7.2
*=1115 Waiver States	3,335	3,737	401	3.9
(Oregon, Delaware and H	Hawaii exclu	ded)		

NOTES:

Hawaii and Delaware are excluded from the table due to missing or inaccurate data on HCFA 2082 reports. Per eligible figures use total current Medicaid expenditures divided by HCFA reported eligibles. Eligible figures estimated for HI and RI for 1996 and 1993 respectively

SOURCE: Quarterly HCFA 64 Forms, HCFA Financial Management Reports, 1991-1997. HCFA-2082 reports, eligibles by Maintenance Assistance Status 1991-1996.

¹ ACGR = average compound growth rate

2.4 Trends in FFS Spending Versus HMO Outlays

The transition to managed care is intended to exert changes in the service delivery system to more efficiently allocate inpatient, outpatient, and physician services, among others. The predicted cost savings of OHP are largely based on the hypothesis that the incentives of managed care will encourage providers and patients alike to switch to more cost-effective modes of care. This section will examine recent expenditure trends in specific service areas traditionally associated with capitated and fee-for-service reimbursement. The intention is to show how the shift in expenditures from traditional FFS to capitated expenditures demonstrates the fiscal impact of managed care in specific service areas. Once again, in order to examine the impact of the OHP on these service areas, the growth will be examined separately for the pre-and post-OHP periods.

Table 2-7 shows the total current medical assistance payments for Oregon by major service category along with their compound rates of growth for both periods. The top panel of the table shows fee-for-service outlays by service category. Since the information is obtained from sections of the HCFA form 64 which only report services by FFS outlays, gradual dollar changes in these FFS categories should reflect the transition to managed care as many services are shifted into capitated reimbursement. The second panel shows the absolute growth in FFS versus capitated outlays, as well as their proportion of Medicaid expenditures over time. Under OHP, it is expected that capitated outlays will increase both in absolute dollars and as an overall percentage of total current expenditures. Total capitated

Table 2-7

Total Current and Net Medical Assistance Payments in Oregon, FFY 1991-1997, By FFS and Capitated Categories of Service

							_		pound An rowth Rat	
FEE-FOR-SERVICE OUTLAYS	<u>1991</u>	<u>1992</u>	<u>1993</u>	<u>1994</u>	<u>1995</u>	<u>1996</u>	<u>1997</u>	<u>1991-93</u>	<u>1993-97</u>	<u>1991-97</u>
Primarily Capitated										
Inpatient Hospital	\$92,232,599	\$128,612,701	\$136,838,385	\$106,529,625	\$141,660,423	\$104,406,672	\$74,268,373	19.7%	-15.3%	-3.6%
Outpatient Hospital	\$33,859,940	\$37,462,485	\$41,358,483	\$47,108,622	\$35,833,499	\$28,084,916	\$17,715,347	10.0%	-21.2%	-10.8%
Physician	\$49,577,412	\$63,532,735	\$72,150,902	\$78,590,735	\$63,621,641	\$49,991,261	\$38,708,371	18.8%	-15.6%	-4.1%
Prescription Drug ¹	\$48,437,732	\$53,698,351	\$58,264,777	\$73,994,905	\$65,150,283	\$48,933,970	\$57,777,439	9.2%	-0.2%	2.9%
Dental	\$5,993,224	\$6,122,670	\$5,998,686	\$6,977,532	\$5,417,374	\$4,609,662	\$2,561,837	0.0%	-21.3%	-14.2%
Total	\$230,100,907	\$289,428,942	\$314,611,233	\$313,201,419	\$311,683,220	\$236,026,481	\$191,031,367	15.6%	-12.5%	-3.1%
Primarily FFS										
Mental health ²	\$13,181,041	\$16,059,463	\$27,777,694	\$35,983,483	\$40,559,047	\$46,614,511	\$48,484,475	37.3%	13.9%	21.7%
Skilled Nursing	\$132,696,634	\$153,896,122	\$159,060,993	\$157,330,852	\$159,663,845	\$164,869,085	\$169,156,589	9.1%	1.5%	4.0%
ICF/MR	\$97,902,659	\$83,138,263	\$80,043,415	\$78,885,481	\$75,644,899	\$77,571,160	\$75,273,311	-10.1%	-1.5%	-4.4%
Home & Comm.	\$80,000,252	\$119,819,051	\$159,934,469	\$167,890,492	\$210,753,260	\$218,997,629	\$225,114,344	34.6%	8.5%	17.2%
Personal Care	\$5,685,383	\$8,178,409	\$12,712,442	\$15,492,437	\$22,099,038	\$21,699,074	\$21,521,781	40.2%	13.2%	22.2%
Target Case Mgt	\$3,919,916	\$10,052,462	\$39,888,696	\$33,913,736	\$37,813,148	\$50,907,672	\$57,589,557	116.0%	9.2%	44.8%
All Others ³	\$59,038,310	\$74,363,125	\$97,254,638	\$137,409,100	\$140,321,189	\$128,586,088	\$126,933,989	25.1%	6.9%	13.0%
Total	\$392,424,195	\$465,506,895	\$576,672,347	\$626,905,581	\$686,854,426	\$709,245,219	\$724,074,046	19.2%	5.7%	10.2%
TOTAL FFS OUTLAYS	\$622,525,102	\$754,935,837	\$891,283,580	\$940,107,000	\$998,537,646	\$945,271,700	\$915,105,413	17.9%	0.7%	6.4%
% of Current Exp.	94.3%	93.8%	93.3%	85.1%	69.5%	61.7%	59.3%	-0.5%	-11.3%	-7.7%
CAPITATED OUTLAYS	\$37,704,455	\$49,840,863	\$64,321,591	\$164,670,011	\$439,148,258	\$586,554,498	\$628,956,531	26.7%	57.0%	46.9%
% of Current Exp.	5.7%	6.2%	6.7%	14.9%	30.5%	38.3%	40.7%	8.2%	45.0%	32.7%
TOTAL CURRENT EXPENDITURES	\$660,229,557	\$804,776,700	\$955,605,171	\$1,104,777,011	\$1,437,685,904	\$1,531,826,198	\$1,544,061,944	18.5%	12.0%	14.2%
Prior Period Adjustments	4,948,720	-3,568,487	-8,822,436	3,479,867	-2,934,697	-40,846,312	-44,487,558			
NET EXPENDITURES	\$665,178,277	\$801,208,213	\$946,782,735	\$1,108,256,878	\$1,434,751,207	\$1,490,979,886	\$1,499,574,386	17.7%	11.5%	13.5%

NOTES:

Inpatient hospital and Mental health service categories include DSH payments for respective years.

SOURCE: HCFA Financial Management reports and 64 Reports, 1991-1997.

¹ While most prescription drugs are under capitation, class 7 and 11 psychotropic drugs are still reimbursed on a FFS basis.

² Mental health services were paid on a fee-for-service basis until 1995, when 25% of counties began paying on a capitated basis. Statewide capitation for mental health services began in January 1998.

³ All others is a residual category including Home Health, other practitioners, other care, clinic services, EPSDT, and Hospice.

Total Current Expenditures reflect actual Medicaid expenditures for the fiscal year before making prior period adjustments.

outlays in Oregon are not itemized by service. The last three lines of Table 2-7 give Total Current and Net Expenses (i.e., Total Computable) after minor prior period adjustments.

The first "Fee-For-Service Outlay" category shows selected "Primarily Capitated" services, which are the services shifted from FFS to capitation under the Oregon Health Plan. With the transition to managed care, we might expect most of these services to be reimbursed on a capitated basis and reported in the "Capitated Outlays" row on the bottom half of the table. For instance, since dental services were capitated beginning in 1994, the period from 1993 to 1997 should show a gradual, yet steady decline in FFS expenditures indicating a shift toward capitated reimbursement. The same pattern should apply for the other five services; as FFS outlays gradually decline, the "Capitated Outlays" row in panel two should gradually increase.

The second panel under "Fee-For Service Outlays" includes "Primarily Fee-For-Service" services that were carved out of the waiver and continue to be reimbursed on a fee-for-service basis. Since these services are delivered and reimbursed in essentially the same fashion before and after the implementation of the waiver, the transition to managed care is not expected to exert as significant an expenditure impact as for the "Primarily Capitated" services. Comparing trends in these areas with "Primarily Capitated" services will indicate

While these five broad service categories have been largely shifted into capitation over the course of OHP implementation, some important exceptions affect analysis of the expenditures for some of these services. For example, although prescription drugs are largely capitated under OHP, class 7 and 11 psychotropic drugs remain under FFS reimbursement. Since these psychotropic drugs comprise a large proportion of growth in the prescription drug category, growth in prescription drug expenditures is difficult to separate into FFS and capitated growth.

the degree to which Medicaid expenditures are growing outside of the managed care demonstration.

Within the "Fee-For Service Outlays", compound growth rates change dramatically for the "Primarily Capitated" services between the pre-and post-OHP periods. While the three largest services experienced positive double-digit rates of growth in the pre-OHP period, all five show sharp spending decreases in the post-OHP period ranging from -0.2 percent for prescription drugs to -21.2 percent for outpatient hospital services. Fee-for-service payments to inpatient hospitals, outpatient departments, and physicians fell dramatically over the post-OHP period by 15.3, 21.2, and 15.6 percent, respectively, each year. In total dollars, these five areas declined from a growth rate of plus 15.6% in the pre-OHP period to an average decline of 12.5 percent for the post-OHP period. Consistent with the move toward capitation, the "Capitated Outlays" row for the pre-OHP period shows a jump in the compound rate of growth from 26.7 percent to 57.0 percent annually during the post-OHP period.

In contrast to the "Primarily Capitated" services, the "Primarily Fee-For-Service" expenditures generally continued to grow over the post-OHP period, albeit at significantly lower positive rates than in the pre-OHP period. The particularly high rate of growth for mental health services is due to benefit expansion under OHP. Mental health services were capitated under OHP beginning in 1995 for only 25 percent of the OHP population. As of 1998, however, OHP mental health services are capitated state-wide. Therefore, these increases in FFS mental health expenditures are likely to abate in the near future. While all

but the ICF/MR services post modest gains over this period, the compound rate of growth for the "Primarily FFS" expenditures falls from 19.2 percent to 5.7 percent in the post-OHP period.

Overall, total FFS outlays grew only 0.7 percent per year over the post-OHP period compared to 17.9 percent annual growth for the pre-OHP period. During the pre-OHP period, FFS expenditures comprised 94 percent of Total Current Expenditures. During the post-OHP period, this percentage fell to 59 percent. At the same time, Capitated Outlays went from 5.7 to 40.7 percent of Total Current Expenditures. However, it is important to note that FFS Outlays still account for the majority of Oregon's Medicaid expenditures, even after OHP has been fully phased in.

Table 2-8 shows further evidence of the shift toward capitated expenditures. During the pre-OHP period, total current payments rose by \$295 million. Fee-for-service outlays accounted for 91 percent of this dollar growth. In contrast, during the post-OHP period, the trend reversed; while total current expenditures grew by \$588 million, capitation payments comprised 96 percent of this growth. These figures show that most of the dollar growth in the post-OHP period came from capitation payments, demonstrating a reimbursement shift to capitated systems, rather than any significant declines in spending by service category.

From these results it is evident that Oregon has successfully converted a significant portion of its Medicaid outlays to capitation. Nevertheless, fee-for-service expenditures still dominate total expenditures necessitating support of two different payment systems

Table 2-8

Decomposition of Total Current Expenditure Growth in Nominal Dollars

Pre and Post OHP periods

Pre OHP:1991-1	1993	Post OHP 1993	3-1997
	Percent		Percent
Growth in Dollars D	Distribution	Growth in Dollars	Distribution
\$268,758,478	91.0%	\$23,821,833	4.0%
\$26,617,136	9.0%	\$564,634,940	96.0%
\$295,375,614	100.0%	\$588,456,773	100.0%
	Growth in Dollars D \$268,758,478 \$26,617,136	Growth in Dollars Distribution \$268,758,478 91.0% \$26,617,136 9.0%	Percent Growth in Dollars Distribution Growth in Dollars \$268,758,478 91.0% \$23,821,833 \$26,617,136 9.0% \$564,634,940

SOURCE: HCFA form 64, selected years.

Secondarily, even with the priority list and capitated payment, Medicaid expenditures continued to grow at a fairly high rate (12 percent annually) in the post-OHP period.

2.5 Trends in Demonstration Versus Non-demonstration Spending

With the implementation of the Oregon Health Plan, Oregon made an aggressive effort to enroll its population in managed care. Yet, despite enrolling 89 percent of its Medicaid beneficiaries in managed care, the Oregon Health Plan still only comprises 57 percent of the total current expenditures for the Oregon Medicaid program. As the last section described, the amount of total current Medicaid expenditures derived from traditional FFS spending has been steadily declining over the post-OHP years. However, while capitated and FFS expenditures associated with the OHP occupy ever-greater portions of total current expenditures, traditional FFS areas carved out of the demonstration continue to account for a significant portion of overall Medicaid spending.

Table 2-9 shows the distribution of expenditures by eligibility group within OHP and as a component of all HCFA-64 Total Current Medicaid expenditures. This allows a comparison of OHP expenditures with the total Medicaid expenditures, to demonstrate how much OHP has grown as a proportion of total current Medicaid spending in Oregon.

As Table 2-9 shows, OHP has been occupying an ever-larger proportion of Oregon's Total Current Medicaid expenditures, growing from 20.1 percent in its first year to 56.5

⁸ The 89% statistic is from HCFA's June 1998 managed care enrollment report.

Table 2-9

Annual Expenditures for Oregon Medical Assistance Programs by Eligibility Group:
Federal Fiscal Years 1994-1997

OHP Expenditures

		Eligibilit	y Groups			
Federal Fiscal Year	Traditional <u>Eligibles</u>	Expansion Eligibles	Phase II Eligibles	Total OHP	Total HCFA-64 Medicaid Expenditures*	OHP as Percent of Total Medicaid <u>Spending</u>
1994	\$155,600,523	\$66,895,972	\$0	\$222,496,490	\$1,104,771,011	20.1 %
1995	289,787,397	258,451,307	170,151,903	718,390,616	1,437,685,904	50.0 %
1996	305,829,230	229,400,490	333,088,792	868,318,504	1,531,826,198	56.7 %
1997	299,514,020	218,144,902	355,232,946	872,891,863	1,544,061,944	56.5 %

NOTES:

SOURCE: HCFA Form 64 for Fiscal Years 1994-1997.

HCFA Form 64.9 Quarterly Medical Assistance Reports for Waiver number11-9-90160/0-01(OHP)

^{*} This category represents the total computable spending on the Oregon Medicaid program, which includes OHP expenditures and spending on carve-out services. OHP monthly spending and eligible information were calculated by Federal fiscal year.

percent in 1997. This figure remained relatively stable for the last two fiscal years, indicating that managed care enrollment for the state has reached an equilibrium point. This stability in OHP expenditures as a percentage of Medicaid spending also shows that despite attempts to move increasing numbers of services under capitation, more than 40 percent of Medicaid expenditures remain outside of the control of managed care. Nonetheless, since the implementation of OHP, nearly \$873 million have been shifted into managed care, including over \$200 million for the expansion population and \$355 million for Phase II eligibles.

2.6 Trends in Administrative Costs

Administrative expenditures associated with OHP have also grown steadily since its implementation in 1994. Still, the administrative costs associated with OHP occupy only a small portion of Oregon's state and local administration dollars relative to the overall expansion of the program.

Table 2-10 shows Medicaid state and local total administrative expenditures for the years 1991-1996 for the nation, Oregon, and OHP, broken down once again by pre and post-OHP periods. Within each level, the table also provides a breakout of administrative spending per eligible and administrative spending as a percentage of total current expenditures. In addition, the OHP section shows OHP as a percentage of the Oregon's total current administrative expenditures for each year. Consistent with expenditure trends throughout the chapter, national and Oregon administrative expenditures differ across the

Table 2-10

Trends in Administrative Costs In Oregon and the Nation in Fiscal Years 1991-1997 (000's)

								ompound Ra of Growth	te
	<u>1991</u>	<u>1992</u>	<u>1993</u>	<u>1994</u>	<u>1995</u>	<u>1996</u>	1991-93	1993-96 ¹	1991-96
Nation									
Total State & Local Admin	\$3,523,991	\$3,810,910	\$4,265,868	\$4,871,604	\$5,463,501	\$5,598,492	9.6%	9.1%	9.3%
Admin \$/Eligible	\$109	\$107	\$110	\$120	\$132	\$136	0.3%	7.0%	4.3%
Admin as % Spending ²	4.0%	3.3%	3.4%	3.6%	3.6%	3.6%	-8.4%	2.4%	-1.9%
Oregon									
Total State & Local Admin	\$76,069	\$81,054	\$81,746	\$105,506	\$121,640	\$122,519	3.6%	13.5%	9.5%
Admin \$/Eligible	\$251	\$242	\$223	\$232	\$251	\$259	-5.9%	4.9%	0.6%
Admin as % Spending	11.5%	10.1%	8.6%	9.5%	8.5%	8.0%	-14.9%	-2.2%	-7.3%
Oregon Health Plan									
Total OHP Admin	NA	NA	NA	\$7,312	\$21,321	\$32,681	NA	74.9%	NA
Admin \$/Eligible	NA	NA	NA	\$30	\$62	\$88	NA	53.2%	NA
OHP as % total Admin	NA	NA	NA	6.9%	17.5%	26.7%	NA	67.4%	NA

NOTES:

OHP administrative costs use OHP rather than the full medical program as denominator.

SOURCE: HCFA Financial Management Report, Fiscal Years 1991-1996.

Form HCFA-64.10 (Line 6) (Source for OHP Administrative figures) Fiscal Years 1991-96.

¹ Compound rate of growth is only computed for Fiscal Years 1994-1996 for the Oregon Health Plan

 $^{^{2}\,\}mbox{All}$ expenditure figures are total current expenditures for each Federal Fiscal Year.

pre and post-OHP periods. During the pre-OHP period, Oregon's annual rate of growth in administrative costs was approximately one-third of the annual growth in national administrative costs. However, during the post-OHP period, the annual growth rate in administrative costs averaged 13.5 percent in Oregon while declining modestly to 9.1 percent for the nation as a whole.

Higher administrative costs in Oregon also corresponded with the growth in OHP. Since 1993, Oregon administrative costs have increased by \$40.7 million while OHP-allocated administrative costs have risen from zero to \$32.6 million. Clearly, these figures show that growth in administrative expenditures attributed to OHP accounted for 80 percent of recent growth in the state's Medicaid administrative payments. By 1996, OHP administration comprised 27 percent of the state's total Medicaid administrative costs.

Oregon's administrative spending per eligible remained roughly twice the national average over both periods. During the second period, spending per eligible increased for both Oregon and the nation, at 4.9 and 7 % respectively. This growth in administrative expenditures in Oregon can be largely attributed to the implementation of OHP, which required the implementation of new accounting, rate setting, management, and information systems associated with the transition to managed care. Essentially, the implementation of OHP created the need to administer two separate programs: the traditional FFS program, and the capitated managed care program. This more complex administrative burden manifested itself in higher administrative expenditures both in absolute terms and in spending per eligible.

Notwithstanding the consistent growth in overall administrative payments in Oregon, the percentage of Medicaid expenditures dedicated to administration actually fell over both periods relative to the nation. National administrative costs comprised 3.4 percent of total current Medicaid expenditures in 1993, rising to 3.6 percent in 1997. In contrast, Oregon's share of administrative costs as a percentage of its current total Medicaid expenditures fell from 8.6 percent in 1993 to 8 percent in 1996. Despite Oregon's declining administrative costs as a percentage of Medicaid expenditures, this percentage remained over double the national loading factor for both periods.

3

Potential Savings From the Priority List

This chapter examines the impact of the prioritized list of health services, or "priority list," on Medicaid expenditures in Oregon. The first section describes Oregon's rationale for prioritizing health services, how the priority list was developed, and its evolution since the inception of OHP. Following this brief overview, the methodology used by Oregon's actuary, Coopers & Lybrand, to estimate the costs associated with covering different levels of service under OHP is discussed. The subsequent section focuses on Oregon's experiences using the priority list to generate savings in the OHP budget.

3.1 Overview of the Development of the Priority List

The Oregon Health Plan (OHP) benefit package is based on a prioritized list of health services. The priority list consists of paired conditions and treatments ranked hierarchically from most to least medically necessary or appropriate. Covered services are those above a cut-off line that is determined according to the level of resources available to fund the program. Services "below the line" are uncovered, except in cases where there is a comorbid condition which would qualify for coverage. The priority list is one of the unique features of OHP and the feature which delayed implementation by about two years.

The priority list was intended to assist the State in rationing the services, not the people that would be covered by the Medicaid program. The theory was that the State could

expand insurance coverage to more low-income uninsured people (who were not otherwise categorically eligible for Medicaid) by eliminating coverage for treatments that were not proven effective, or for conditions which improved on their own. The list of covered benefits would be reduced when the State faced a budget shortfall, as opposed to restricting eligibility or cutting provider fees. (See the end of this chapter for difficulties faced by the state legislature in using the priority list as a cost containment tool.)

Within the State, there is virtually unanimous praise for the list. In fact, the list of covered services is quite extensive, and represents an expansion of benefits received under the traditional Medicaid program (e.g., preventive care for adults, dental care for adults, hospice care, and organ transplants), while few services of consequence are being denied. The services provided by OHP include:

- Preventive services to promote health and reduce the risk of illness (e.g., immunizations, well child visits, physical exams for adults, mammograms and pap smears, prenatal care).
- All diagnostic services such as exams, x-rays, laboratory tests.
- Comfort care or hospice treatment for all terminal illnesses.
- All physical and mental health services (in demonstration areas) included in the condition-treatment list of services.¹

The priority list was developed through a long process involving close negotiations between a number of state agencies and HCFA. While the state developed the list, it nonetheless was required to authorize its list setting methodology on an ongoing basis with

Mental health services were included on the Integrated List of Prioritized Health Services in 20 counties, which included approximately 25 percent of the State's population. In the remaining (nondemonstration) counties, mental health benefits were limited to Priority One services for adults (i.e., the Severely and Persistently Mentally III who are a danger to themselves or others), and comprehensive benefits for persons under age 21.

HCFA. Consequently, the final methodology for constructing the list was the result of a number of changes negotiated and approved by HCFA.

For instance, under OHP, dental services are covered for the treatment of conditions such as cavities. In other states, however, dental care for adults might not be covered under any circumstances. Conversely, surgical treatment provided to an adult suffering from an uncomplicated hernia may not be covered under OHP because this condition falls below the coverage threshold, but such care would be reimbursable under a standard Medicaid program that covers all medically appropriate surgery.

The priority list was designed to more equitably and efficiently ration health care resources by restricting the coverage of ineffective treatments rather than resorting to more traditional cost-saving measures, such as limiting program eligibility or reducing provider payments. It was expected that any budgetary shortfalls would be remedied by ratcheting up the funding line on the priority list rather than tightening eligibility requirements. Proponents of the priority list argued that the State could cover more low-income uninsured Oregonians by shifting resources away from the financing of unnecessary and ineffective services and into eligibility expansions and increased provider payments.

3.1.1 Historical Process

The primary task of the HSC is to present a new prioritized health services list to the Governor and Legislature in July of the even year prior to the start of the legislative session.

The Health Services Commission (HSC) was created by the Oregon legislature in 1990 to

develop the priority list. Condition treatment pairs comprise the "lines" on the priority list. Each complete line consists of a diagnosis or diagnoses for a condition or set of conditions, along with the treatment or treatments used for the diagnosis. ICD-9 treatment codes are also listed for each diagnosis, along with CPT-4 codes to accurately capture the procedures used to treat the condition. In the developmental stage, HSC convened numerous expert panels and public meetings to gather input from health care professionals, Medicaid beneficiaries, and other stakeholders on how to prioritize health services. In addition, HSC conducted several "community values" surveys to develop a set of criteria for ranking services that reflected the public's values regarding medical effectiveness, cost effectiveness, and other considerations.

After gathering input from a wide range of sources, HSC developed a methodology for ranking the condition-treatment pairs. The state approved Prioritized list then was submitted to HCFA for approval. After receiving HCFA approval, the state legislature funded 606 out of 696 lines for the 1993 to 1995 biennieum. First, pairs were ordered by the ability of the specified treatment to prevent death. Those pairs that tied in this initial ranking were then ordered by their average cost, with the higher-cost pairs ranked lower. Next, HSC reviewed the list using a set of subjective criteria developed through the community values surveys. These criteria emphasized early intervention and preventive care while cosmetic services and medically ineffective treatments were considered to be less significant. The line items were then re-ranked according to these criteria. Finally, HSC broke the list down into groups of 25 line items, and within each group, line items were resorted according to the avoidance of death and cost-effectiveness criteria.

Upon completion of this process, HSC referred its prioritized list of services to Coopers & Lybrand for estimating the costs associated with various coverage thresholds. (The methodology employed by the Coopers & Lybrand actuaries for pricing the priority list is detailed in Section 3.2). Based on these cost estimates, the legislature determined the level of services that could be covered given the level of resources allocated to OHP during each biennial legislative session. The capitation rates paid to health plans were then calculated to reflect the costs associated with covering services above this threshold.

3.1.2 Adjustments to Primary Threshold

The priority list has evolved considerably since it was first developed in 1991.² Before the demonstration began, the Health Services Commission (HSC) requested the authority to make technical corrections to the priority list. In 1991, the Oregon Legislature granted the Commission the ability to revise the list under the following circumstances: (a) technical changes due to errors or omissions; and (b) changes due to advancements in medical technology or new data regarding health outcomes. If new funding is required to implement a change, the Commission is required to report to the Emergency Board for funding.

Requests for technical corrections to the priority list are sent to the Health Outcomes Subcommittee. If the Subcommittee recommends the request to HSC for approval, then the fiscal impact would be assessed by the Office of Medical Assistance Programs (OMAP) and

² The Health Services Commission first developed the priority list in 1991. However, HCFA did not grant Oregon a Section 1115 Waiver to implement the priority list until March, 1993. The list was then implemented in February, 1994.

the actuary. HSC also can review any line upon request by an individual member of the Commission. In light of new information the Health Outcomes Subcommittee applies content-neutral criteria (derived from the community values) for re-assessing the placement of a C-T pair on the list.

In 1994, 40 technical changes were made to the list. The majority of these changes involved adding or deleting CPT-4 or ICD-9 codes which refined the codes to better reflect current medical practice (HSC, 1995). However, one shift in the priority list is particularly worth noting. The public and the medical community did not accept as being below the line the surgical repair of uncomplicated hernias in children. Adverse media publicity occurred within weeks of the program's implementation. Formerly at line 607, this C-T pair was moved to line 6, following the review of new medical information on health outcomes. The fiscal impact of this change was under 0.2 percent of the total capitation. According to the actuary, Coopers and Lybrand, and the HSC, the cumulative effect of all 40 changes was less than 1 percent (HSC, 1995).

During the first year, the Commission added eight new lines to the list (as a result of splitting a previous line into two lines); eleven items were moved from one line to another line; two lines were deleted from the list; and six lines were moved from their original position.

Between 1995 and 1997, HSC continued to update the priority list. In total, over 3,000 technical changes were authorized by HSC. Line movements for 23 separate condition-treatment pairs were authorized, including the movement of medical therapy of infectious mononeucleosis and deviated nasal septum below the funding line. A host of new

condition-treatment pairs were also added to the list during this period, such as autologous bone marrow/stem cell transplantation for breast cancer, smoking cessation, and preventive foot care services.

3.2 Construction of Savings Estimates from Prioritizing Services

To assess the priority list's role as a cost-containment mechanism, the State's methodology for estimating cost savings generated by the priority list must first be examined. This section describes the methodology employed by Coopers & Lybrand to derive the average monthly per capita costs and illustrates how the monthly per capita cost estimates for various coverage thresholds translate into projected savings for OHP.

Our analysis is based primarily on the discussion of actuarial methodology provided in Coopers & Lybrand's "Analysis of Federal Fiscal Year 1994 & 1995 Average Costs," which outlines cost projections for the first two years of the demonstration. It is important to note that the cost estimation methodology—and, in particular, some of the underlying assumptions regarding the medical costs of expansion eligibles—have since been modified to reflect actual costs under OHP. A more detailed summary of the actuaries' methods is provided in Appendix A.

3.2.1 Coopers & Lybrand's Actuarial Methods in Costing Conditions

The primary data bases for the cost estimates included claims data from Oregon's Medicaid Management Information System (MMIS), and from Blue Cross/Blue Shield of Oregon (BCBSO). In addition, data on cost-to-charge ratios were obtained from the Oregon

Office of Health Policy and the federal Resource Based Relative Value Scale (RBRVS) data bases. Mental health utilization and cost data were provided by the Oregon Mental Health Division and two Oregon-based mental health care plans.

To calculate the monthly per capita costs associated with different threshold levels, actuaries at Coopers & Lybrand first had to determine the average per member per month (PMPM) cost for covering all services included in the priority list. The current eligibles' utilization rates were based on MMIS claims data, while estimates for the expansion population were based on the utilization rates of a commercial population enrolled in BCBSO, adjusted for higher anticipated outpatient and mental health utilization rates. The average allowed *charge* for each service category was first computed for the current and expansion eligible populations using the MMIS and BCBS claims data, respectively. The actuaries then employed several different data bases to convert charges to costs for each of the 90 service categories.

Several adjustments to the average PMPM cost estimates were made. First, they were updated to the rate year using different indices for different services. Second, an administrative allowance was added on to cover managed care activities. Third, a negative adjustment was made for expected managed care savings. Further demographic adjustments were made to control for differences in age, gender, and severity of illness between current eligibles and the expansion population. Finally, adjustments were made for the spillover feefor-service spending of eligibles who eventually enter managed care during the year.

3.2.2 Actuarial Adjustment for the Priority Threshold

The actuaries' next task involved calculating the average PMPM cost for covering services above a specified cut-off line on the priority list. To estimate the average cost for various threshold levels, it was first necessary to compute the average cost associated with each condition-treatment pair, or "line item," on the priority list.

The aggregated expenditure levels were then converted into monthly per capita expenditures for each line item. The calculation of the average monthly per capita cost for various threshold levels was relatively straightforward. The average monthly per capita cost for each individual line item above the threshold were cumulated to arrive at the total average monthly per capita cost for a given funding line.

Using the monthly per capita cost estimates developed by Coopers & Lybrand, program savings for the different thresholds were projected by first calculating the total cost of each threshold. Eligibility projections were estimated by the Lewin Group based on (a) historic eligibility trends in Oregon's Medicaid program for the current eligible population; and (b) changes in eligibility for a subsample of Oregon residents included in the Current Population Survey and with demographic and socioeconomic characteristics similar to those of the expansion population.

Projected savings associated with a certain threshold were computed by Coopers & Lybrand as the difference between the total estimated cost cumulated to a given threshold and the projected cost of funding the traditional Medicaid benefit package covering all condition/treatment pairs, holding other demonstration-related factors (e.g., eligibility expansions, provider reimbursement increases) constant.

3.3 Initial Forecasts of Savings

In the original Section 1115 waiver application submitted to HCFA in August 1991, the State proposed setting the coverage threshold at line 587 out of 676 condition-treatment pairs.³ Aggregated over the five-year demonstration period, it was estimated that limiting reimbursement to services at line 587 or above would cost the State \$169.2 million (2.8 percent) less than if it provided the traditional Medicaid benefit package. Maintaining the coverage threshold at line 587 over a five-year period was predicted to reduce the average growth in total OHP expenditures by approximately 19 percent when the five-year saving were prorated over five-years of expected outlays. These savings result from fewer covered services and the forecasted inflation in uncovered services.

To illustrate the sensitivity of the OHP budget to changes in the funding line, it was estimated that raising the coverage threshold to line 530 would yield \$327.2 million (5.6 percent) in net savings over the five-year period. Conversely, if the funding line remained at line 640 over the span of the demonstration, total program savings would amount to only \$101.7 million (1.7 percent).

The following table, constructed by Coopers & Lybrand for OMAP using 1996 data forecasted through fiscal year 1999, shows expected savings for selected priority thresholds:

Line Item Threshold	<u> Average Per Capita Cost</u>	Percent of Total Cost
743 (all lines)	\$249.40	100.0%
683	238.82	95.8

³ The legislature originally determined that it could fund services up to line 587. However, when the priority list was finally implemented in 1994, the funding line was set at line 565. The actual content of the list also changed over this period.

593	232.53	93.2
574	227.02	91.0
533	223.71	89.7

For example, by setting the funding line at line 574, the State would spend 9 percent less per beneficiary per month than if it covered all 743 line items.⁴

When OHP was implemented in 1994, the legislature determined that, with roughly \$1.0 billion in State and federal funds available to finance the program, the State could cover services up to line 565 on the priority list. The funding line was then raised to line 606 with the addition of mental health services to the priority list shortly after OHP was implemented. While somewhat more expensive than under the existing program, covering services up to this threshold would still cost approximately 8 percent less than covering all services included on the list for both current and new eligibles, according to Coopers & Lybrand's calculations.

⁴ At this point, HER staff have not been able to obtain Coopers & Lybrand's estimate of per capita costs for line 587.

3.4 Changes in the Funding Line and Expected Savings

In theory, the priority list provides the State with the flexibility to create a benefits package that reflects the level of funding available to OHP. The funding line is thus a primary component of the fiscal management of OHP. However, OHP administrators in Oregon have encountered numerous difficulties in their efforts to employ the funding line as a dynamic cost-containment mechanism, suggesting that the priority list's ability to address funding shortfalls may be limited. This section examines Oregon's experience using the priority list to control program expenditures.

3.4.1 First Revision to 1995-97 Budget

Since the beginning of OHP, the funding line has been moved twice. In response to a forecasted overrun in the 1995-1997 biennium OHP budget, OMAP requested approval from HCFA to raise the funding line from 606 to 581 (out of a total of 745 line items). This funding line shift, which was expected to save a total \$51.8 million, effectively moved the treatment for conditions such as chronic bronchitis and certain digestive disorders below the funding line, implying that they would no longer be covered by Medicaid. The line movement was approved by HCFA in July, 1995, and went into effect in January, 1996. The actuaries had to adjust the HMO premiums downward for the newly uncovered services.

This line movement only produced 30 percent of the savings needed to shore up the OHP budget, however. To close the budgetary gap, the State requested permission from HCFA to implement several other cost-saving measures. According to the "1995-1997"

Legislatively Adopted Budget Report" produced by the Department of Human Resources, the following changes and their estimated savings were proposed to HCFA:

Proposed Changes	Total Savings
Shift in coverage threshold from line 606 to line 581	(in millions) \$51.8
Establish a sliding schedule of premium payments for new OHP eligibles	13.2
Determine eligibility for new OHP eligibles based on three months of income instead of one month	11.4
Discontinue OHP coverage for full-time college students who are not eligible for other public assistance programs ⁵	20.8
Establish an asset test for new OHP eligibility of \$5,000	26.1
Delay statewide implementation of expanded mental health benefits	61.3
Total Savings ⁶	184.6

HCFA ultimately approved these cost-cutting measures, and they were phased in beginning in December, 1995.

3.4.2 Second Revision to 1995-97 Budget

As it turned out, these cost containment measures were not enough. OMAP forecasted a deficit in the 1995-1997 OHP biennium budget again in April 1996, and a task force was created to explore the State's options for reining in health care expenditures to

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⁵ Coverage for full-time college students was re-instated in 1997.

OMAP also sought approval from HCFA to establish co-payments for most OHP eligibles over 17 years of age, but this measure was later abandoned in favor of increased premiums.

address an additional projected shortfall of \$18.3 million. The task force first considered raising the coverage threshold to contain OHP expenditures. Working in conjunction with HSC, the task force calculated that the funding line would have to be ratcheted up from line 581 to line 434 to produce the \$18.3 million in savings. As a result, treatment for conditions such as bladder disorders, respiratory failure, and injuries to internal organs would fall below the funding line. Given the number of vital services that would no longer be covered, the task force concluded that scaling down the list of covered services by 147 line items was not a feasible option.

The task force also considered the possibility of discontinuing coverage of optional Medicaid services for new OHP enrollees, such as dental services, rehabilitative mental health and chemical dependency services, prescription drugs, medical supplies and equipment, and physical therapy, among other things. However, since optional Medicaid services were already integrated into the priority list, the task force concluded that shifting the funding line was a more logical approach to curbing expenditures than trying to carve out optional services from each line item. Indeed, denying coverage of certain services contradicted the "cost-effectiveness" strategy of denying coverage of condition/treatment pairs.

Instead of drastically paring down the OHP benefits package, the State again pursued a more piecemeal approach to containing expenditure growth. Permission from HCFA was sought to raise the funding line from 581 to 573—a shift that would yield \$1.0 million in projected savings, or only 5 percent of the \$18.3 million. In conjunction with this line

movement, the State requested authorization from HCFA to implement the following program changes to shave off the remaining \$17.3 million:

<u>Proposed Changes</u>	Total Savings (in millions)
Shift in coverage threshold from line 581 to line 573	\$1.0
Increase proportion of OHP beneficiaries enrolled in managed care to 87 percent	3.2
Lower managed care trend rate	4.0
Adjust for savings resulting from reduced AFDC caseloads	1.1
Adjust accounting methods to correct expenditure charging	0.6
Speed up enrollment in managed care plans	1.5
Develop guidelines for dental services to curb unnecessary procedures	1.0
8 percent reduction in fee-for-service reimbursement	6.0
Total Savings	\$18.4

While authorization was granted for the reduction in reimbursement rates and other cost-cutting provisions, HCFA did not initially agree to the line movement on Oregon's revised priority list. In particular, HCFA objected to the noncoverage of fixed bridges for anterior tooth replacements as well as treatments for noncervical warts and unspecified

anomalies of the ear. After several months of negotiations between HCFA and OMAP, the new priority list was approved and the funding line was set at line 574 on May 1, 1998.⁷

3.4.3 The 1997-99 OHP Budget

According to the 1997-99 Oregon budget report (p.8) produced by the Department of Human Resources, funding had stabilized for the existing OHP Medicaid program. The state could maintain all current services and fully integrate mental health services. The program expanded coverage to children and pregnant women with incomes less than 170 percent of poverty. It also established the Family Health Insurance Assistance program to assist low-income Oregonians in purchasing employer-sponsored health insurance. The budget allotted \$206 million in tobacco tax revenues to support OHP.

3.4.4 Revisions to Proposed 1999-2001 Budget

A shortfall was then projected for the 1999-2001 OHP biennial budget. According to actuarial projections cited in the governor's 1999-2001 OHP budget proposal, the State needed to invest an additional \$179 million (equal to 33 percent of the General Fund contribution to the 1997-1999 OHP budget) in order to maintain the current program.

The sources of this projected shortfall include (a) \$62.7 million in declining tobacco tax revenues and the sunset of the 10 cent tobacco tax passed in 1993; (b) \$68.8 million in anticipated medical inflation; (c) \$21.4 million less in federal funding due to a lower federal

Originally, OMAP proposed shifting the funding line to 573. However, the threshold was raised to line 574 to ensure that medical therapy for non-cervical warts remained a covered service.

matching rate; (d) \$14.6 million in OHP caseload increases; and (5) \$11.58 million in expenditures associated with extending coverage to Poverty Level Medical (PLM) women with incomes between 133 and 170 percent of the FPL, college students, and increased OHP enrollment levels due to aggressive outreach efforts for the Children's Health Insurance Program (CHIP).

To curb OHP expenditures, the governor put forward the following proposals:

Proposed Changes	Estimated General Fund Savings (in millions)
Shift the coverage threshold from line 574 to line 564	\$4.4
Tighten eligibility screening efforts	\$14.6
Eliminate eligibility for PLM women with incomes between 133 and 170 percent of the poverty level	\$11.0
Eliminate eligibility for full-time college students who qualify for Pell Grants	\$3.5
Discontinue CPI updates for certain fee-for-service reimbursement rates	\$5.0
Eliminate cost-based reimbursement for rural hospitals	\$1.9
Change date of OHP eligibility from date of application to date of approval for coverage	\$4.1
Total Savings	\$44.5

The cuts listed above were based on the assumption that the Legislature would not restore the 10 cent tobacco tax that is due to sunset in 1999. However, given the likelihood that it would not be phased out, the Kitzhaber administration proposed using the estimated

\$20.0 million in revenues from this tax to keep PLM women and college students in OHP and to partially restore fee-for-service reimbursement rates for hospitals and other providers.

As is evident, the State is limited in its ability to generate the necessary level of savings by moving the funding line on the priority list. Shifting the coverage threshold up 10 lines on the priority list would only result in an estimated \$4.4 million in General Fund savings and would exclude essential services such as the treatment of urinary obstruction, contact dermatitis, and torn ligaments in the knee from coverage under OHP. Even if the State were willing to implement this line movement, it is unlikely that HCFA would provide the necessary authorization.

To achieve more substantial savings, some legislators have proposed removing adult dental care services (which are optional Medicaid services) from the priority list. In addition, the Legislature has considered paring back on mental health services by removing them from the list. However, only the Health Services Commission has the authority to revise the priority list, and it does not appear likely that the HSC will endorse these radical changes.

4

State Sources of Revenues to Support OHP

This chapter focuses on the impact of Medicaid expenditure growth in Oregon on the State's budgetary resources. After briefly reviewing the data sources on State finances, Medicaid expenditure trends are analyzed as a share of State tax revenues. This is followed by an examination of the net burden of Medicaid on Oregon taxpayers using Gross State Income (GSI) as a benchmark of taxpayer wealth. Next, we present a brief discussion of the progressivity of the revenue sources used by the State to fund all its programs, including Medicaid. Medicaid is a program specifically designed to help the poor; thus it is reasonable to evaluate the incidence of the tax burden on the poor and better-off segments of the population. Then, we turn our attention to the other claims on State tax revenues, providing a description of the competing claims on State revenues that add to the State's fiscal pressure. The chapter concludes with an analysis of the growth in funding sources earmarked for Medicaid or OHP more specifically. Tobacco taxes have been a favored source of funding the State's expansion, supplemented by premiums charged expansion eligibles, but trends in the former have dire implications for supporting future increases in Oregon Medicaid spending.

4.1 Data Sources

The primary data sources for these analyses include (a) the quarterly HCFA-64 expenditure reports; (b) annual State expenditure reports produced by the National Association of State Budget Officers (NASBO); and (c) the Oregon Department of Revenue's Monthly Receipt Statements. The HCFA-64 reports disaggregate expenditures on Oregon's Medicaid program by federal and State contributions. The NASBO reports provide comparative data on Medicaid and other state program outlays in Oregon vis-a-vis national average expenditures. On the revenue side, the monthly receipt statements disaggregate State revenues by personal income tax revenues, corporate income tax revenues, and revenues from other taxes levied by the State.

4.2 Share of Medicaid of State Tax Revenues

Nationwide, an increasingly large share of States' revenues have been consumed by their burgeoning Medicaid programs. According to the annual NASBO expenditure reports, Medicaid consumed an average of one out of ten dollars in a given State's budget in 1987. By 1997, an average of one out of every five State dollars was being allocated to Medicaid. Oregon implemented OHP in an attempt to contain program expenditures while expanding eligibility, thereby decreasing the program's burden on budgetary resources. This section examines the financial burden of Oregon's Medicaid program both before and after the implementation of OHP.

According to Table 4-1, Oregon's share of total Medicaid spending underwent a two-and-a-half-fold increase between 1991 and 1997, rising from \$240 million to \$608.3 million over the seven-year period. Although these outlays represent a considerable increase in the aggregate, the average annual growth rate in State Medicaid expenditures actually decreased from 20 percent per annum to roughly 13 percent per annum following the implementation of OHP.

Total State revenues available for funding the Medicaid program also increased between 1991 and 1997. In the aggregate, revenues rose from approximately \$2.26 billion to \$3.89 billion. However, the 71.8 percent growth in State revenues over this period was outstripped by the 153.5 percent expansion in State Medicaid outlays. Table 4-1, next to last column, indicates that, after adjusting for growth in the State's revenue base, outlays for the Medicaid program have grown substantially as a proportion of total revenues. Between 1991 and 1997, the proportion of the total revenues consumed by the entire Medicaid program rose from less than 11 percent to almost 16 percent—a 47 percent increase in its share.

The burden of Medicaid expenditures on the State's General Fund increased as well, although in a non-linear fashion. As the last column in Table 4-1 illustrates, Medicaid spending as a proportion of General Fund resources climbed from 10.6 percent in 1991 to 16.6 percent in 1996, but then fell to 13.8 percent in 1997, a rate very similar to 1993 prior to OHP. This decline can be explained by a very modest increase of 2 percent in the State's share of Medicaid outlays between 1996 and 1997, coupled with a significant increase of

Table 4-1

Oregon Medicaid Expenditures and Revenue Sources (in millions)

	Medicaid Expenditures			Potential Revenue Sources				Burden of Medicaid Program on State Budget		
<u>Year</u>	Total Spending	Federal Share	State Share	General <u>Fund</u>	Earmarked Tobacco Tax Revenues	OHP Premium Revenues*	Total Medicaid Revenue <u>Sources</u>	Medicaid as a Proportion of Total State Revenue Sources	Proportion of General Fund Revenues	
1991	\$660.2	\$420.2	\$240.0	\$2,261.7			\$2,261.7	10.6%	10.6%	
1992	804.8	513.1	291.7	2,420.9			2,420.9	12.0	12.0	
1993	955.6	597.7	357.9	2,692.7			2,692.7	13.3	13.3	
1994	1,104.8	688.0	416.8	2,979.5	\$16.8		2,996.3	13.9	13.3	
1995	1,437.7	898.1	539.6	3,236.2	28.2		3,264.4	16.5	15.7	
1996	1,531.8	936.5	595.3	3,346.7	29.0**	\$4.2	3,379.9	17.6	16.6	
1997	1,544.1	935.8	608.3	3,813.2	68.7**	4.2	3,886.1	15.7	13.8	
Percent Change, 1991-1997	133.9%	122.7%	153.5%	68.6%			71.8%	47.5%	29.8%	
Compound Growth Rate, 1991-1993	18.5	17.6	20.0	8.7			8.7	11.3	11.3	
Compound Growth Rate, 1993-1997	12.0	11.2	13.3	8.7			9.2	4.1	0.9	

NOTES:

SOURCES: Medicaid Expenditures: Quarterly HCFA 64 Forms.

Revenue Sources: Oregon Department of Revenue Monthly Receipt Statements.

^{*} The premium revenues were estimated based on biennial collection figures.

^{**} The tobacco tax revenues earmarked for OHP have been estimated based on a legislatively-approved budget allocation formula.

nearly \$500 million in General Fund revenues. Despite an increasing burden in the aggregate, the *growth rate* in Medicaid's share of the General Fund dropped from 11.3 percent annually in the pre-OHP period (1991-1993) to 4.1 percent annually after OHP was implemented in 1994.

As Table 4-1 illustrates, tobacco and premium revenues earmarked for OHP have partially alleviated the budgetary pressure exerted by Medicaid on the General Fund. Whereas the burden of Medicaid on total State revenues expanded by over 47 percent between 1991 and 1997, the burden placed on the General Fund increased by less than 30 percent. This finding suggests that the introduction of new funding sources for OHP (mainly tobacco taxes and OHP premiums) has partially alleviated the pressure exerted by Medicaid spending growth on General Fund resources.

The sizable growth in General Fund revenues available to support health care expansion can be attributed to the State's strong economy, which boosted personal and corporate income tax revenues. Table 4-2 reveals that General Fund Total Revenues expanded by almost 14 percent between 1996 and 1997, alone. Revenues from Oregon's personal income tax surged by 12.8 percent between 1996 and 1997, and contributions from the State's corporate income tax climbed 28 percent.

Personal and corporate income taxes have been the primary sources of revenue for Oregon's General Fund. Together, these taxes have provided the General Fund with over 95 percent of its annual revenues. In contrast, revenues from the inheritance tax and non-

Table 4-2 Primary Sources of Oregon General Fund Revenues, 1991 - 1998 (in millions)

	Pe	rsonal Inco	ome		Corporatio	n	Tob	acco Produ	ıcts*		Inheritance	9	Total Re	venue**
Fiscal Year	Total <u>Amount</u>	Annual <u>Increase</u>	Percent of Total Revenue	Total <u>Amount</u>	Annual <u>Increase</u>	Percent of Total Revenue	Total <u>Amount</u>	Annual Increase	Percent of Total Revenue	Total <u>Amount</u>	Annual <u>Increase</u>	Percent of Total Revenue	Total <u>Amount</u>	Annual <u>Increase</u>
1990-1991	\$2,026.3		89.6%	\$149.1		6.6%	\$68.1		3.0%	\$17.8		0.8%	\$2,261.7	
1991-1992	2,178.7	7.5%	90.0	150.9	1.2%	6.2	70.3	3.3%	2.9	20.4	14.6%	0.8	2,420.9	7.0%
1992-1993	2,383.2	9.4	88.5	198.0	31.2	7.4	69.4	-1.3	2.6	41.5	103.3	1.5	2,692.7	11.2
1993-1994	2,583.5	8.4	86.7	262.8	32.8	8.8	87.7	26.4	2.9	45.3	9.3	1.5	2,979.5	10.7
1994-1995	2,797.6	8.3	86.4	311.9	18.6	9.6	100.2	14.2	3.1	26.0	-42.6	0.8	3,236.2	8.6
1995-1996	2,901.7	3.7	86.7	300.0	-3.8	9.0	103.0	2.9	3.1	41.3	58.6	1.2	3,346.7	3.4
1996-1997	3,272.6	12.8	85.8	384.0	28.0	10.1	102.8	-0.2	2.7	33.9	-17.9	0.9	3,813.2	13.9

NOTES:

SOURCE: Oregon Department of Revenue Monthly Receipt Statements, 1992-1998.

^{*} A portion of tobacco tax revenues are earmarked for OHP and other programs, but the figures presented here represent only the portion of tobacco tax revenues that were allocated to the General Fund.

** Because tobacco tax revenues allocated to "Other Funds" are included in this table, the Total Revenue for the General Fund will be overstated.

earmarked taxes on tobacco products flowing into the General Fund have comprised less than five percent of the annual General Fund. As will be discussed in section 4.6, a large proportion of tobacco-generated revenues have been channeled directly into OHP with the enactment of tobacco tax increases in 1993 and 1997.

4.3 Burden of Medicaid on Taxpayers

Another way of measuring the Medicaid burden is to benchmark expenditure growth against the overall growth in the economy. Gross State Income (GSI) is often considered as a proxy for a state's total tax base. Dividing annual State Medicaid expenditures by estimated GSI provides yet another rough indicator of taxpayer burden due to Medicaid. GSI estimates were calculated by multiplying State per capita income figures by total population estimates.¹

As reported earlier, Oregon experienced a two-and-a-half fold increase in total outlays for its Medicaid program between 1991 and 1997. In contrast, Table 4-3 shows that the State experienced only a 55 percent rise in GSI (from \$50.3 billion to \$77.8 billion) between 1991 and 1997. Combining these two statistics in the last column of Table 4-3, it appears that relative to Oregon's aggregate tax base, the net burden of Medicaid spending (i.e., State Medicaid Expenditures divided by GSI) rose from one-half of one percent of GSI in 1991 to approximately four-fifths of one percent of GSI in 1997. Over this seven-year

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¹ Total tax revenues (TTR) from all potential sources would be an even more comprehensive measure of the state's potential tax capacity. Unfortunately, the Advisory Commission on Intergovernmental Relations discontinued publications of their bi-annual TTR data series on states.

Table 4-3

Net Burden of State Medicaid Expenditure Growth on Taxpayers in Oregon, 1991 - 1997

<u>Year</u>	Per Capita <u>Income</u>	Annual <u>Increase</u>	Total <u>Population</u>	Annual <u>Increase</u>	Gross State <u>Income</u>	Annual <u>Increase</u>	State Medicaid <u>Expenditures</u>	Annual <u>Increase</u>	Net Taxpayer <u>Burden</u>
1991	\$17,597		2,858,507		\$50,301,147,679		\$240,035,000		0.48%
1992	18,530	5.3%	2,919,507	2.1%	54,098,464,710	7.5%	291,695,000	21.5%	0.54
1993	19,512	5.3	3,035,788	4.0	59,234,295,456	9.5	357,865,000	22.7	0.60
1994	20,497	5.0	3,088,635	1.7	63,307,751,595	6.9	416,780,000	16.5	0.66
1995	21,579	5.3	3,142,978	1.8	67,822,322,262	7.1	539,559,000	29.5	0.80
1996	22,852	5.9	3,196,313	1.7	73,042,144,676	7.7	595,343,000	10.3	0.82
1997	23,984	5.0	3,243,487	1.5	77,791,792,208	6.5	608,269,000	2.2	0.78
Percent Change, 1991-1997	36.3%		13.5%		54.7%		153.4%		63.9%

SOURCES: Department of Commerce, Bureau of Economic Analysis Regional Accounts Data Report, October 1998.

Census Bureau State Population Estimates, July 1997.

HCFA Financial Management Reports, 1991-1997.

period, the burden of Medicaid expenditure growth on Oregon taxpayers rose 64 percent net of the federal contribution.. The aggregate taxpayer burden was still modest, however, in spite of impressive numbers of new eligibles and rapid spending increases. In 1997, Oregon's own Medicaid spending relative to Gross State Income was 32nd highest among 51 states plus the District of Columbia (see Table 4-3a). Its burden was equivalent to that of Texas, Florida, Mississippi, and Georgia, while roughly one-third the burden of New York and the District of Columbia. Washington State's Medicaid financial burden in 1997 was approximately 40 percent higher then Oregon's. Oregon's economy has been very strong throughout the 1990s, softening the financial impact of the expansions.

4.4 Progressivity of General Fund Tax Revenues

In assessing the tax burden associated with a publicly-financed program, it is important to understand how the tax burden is distributed. In terms of its overall tax effort, Oregon historically has taxed its residents and corporations at a level that is more or less equal to the State's tax capacity.² In other words, Oregon's taxpayer burden has been similar to the average taxpayer's burden nationwide. Unfortunately, tax effort and capacity indices measured by the Advisory Commission on Intergovernmental Relations only extend up to 1991. Data on Oregon's actual tax effort over the period of our study are not available. Assuming general tax rates have not risen in Oregon in the 1990s, it is likely that the State's

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² Tax capacity is measured according to the Advisory Commission on Intergovernmental Relations (ACIR) by weighting a State's myriad tax bases (e.g., personal income, corporate income, consumer sales, mineral sales) by a national average set of tax weights.

Table 4-3a

Ranking of State Medicaid Financial Burden, 1991-1997

Ranked by Gross state Income in FFY 1997

GSI: Ratio of State-Only Medicaid	
Spending/Gross State Income (%)	

	Spending/Gross S	ate Income (%)		
	1991	1997		
<u>States</u>	<u>% GSI</u>	<u>%GSI</u>		
New York	2.01	2.21		
District of Columbia	1.45	2.13		
Rhode Island	1.43	1.60		
Massachusetts	1.53	1.42		
Maine	0.96	1.42		
Connecticut	0.82	1.26		
Pennsylvania	0.75	1.21		
New Hampshire	0.82	1.12		
New Jersey	0.81	1.04		
Washington	0.65	1.04		
Vermont	0.72	1.01		
Delaware	0.60	1.01		
Hawaii	0.45	1.00		
United States	0.77	1.00		
Michigan	0.85	0.99		
Minnesota	0.86	0.98		
Alaska	0.63	0.97		
Tennessee	0.67	0.96		
Missouri	0.17	0.95		
Illinois	0.49	0.95		
California	0.63	0.94		
Ohio	0.71	0.94		
West Virginia	0.48	0.93		
Kentucky	0.65	0.92		
Maryland	0.63	0.91		
North Carolina	0.56	0.91		
Wisconsin	0.75	0.81		
North Dakota	0.63	0.78		
South Carolina	0.58	0.78		
Texas	0.46	0.77		
Florida	0.55	0.76		
Oregon	0.44	0.75		
Mississippi	1.85	0.75		
Georgia	0.61	0.75		

Table 4-3a (continued)

Ranking of State Medicaid Financial Burden, 1991-1997 Ranked by Gross state Income in FFY 1997

GSI: Ratio of State-Only Medicaid Spending/Gross State Income (%) 1991 1997 **States** % GSI %GSI Alabama 0.43 0.73 0.50 Nebraska 0.73 New Mexico 0.40 0.71 0.57 Iowa 0.68 Louisiana 0.75 0.68 Arkansas 0.50 0.68 Indiana 0.64 0.68 Wyoming 0.34 0.68 South Dakota 0.46 0.68 Colorado 0.50 0.66 0.48 Montana 0.66 0.62 0.66 Kansas 0.48 Virginia 0.61 Arizona 0.44 0.56 Idaho 0.32 0.53 0.34 Nevada 0.51 Oklahoma 0.48 0.51 Utah 0.31 0.39

SOURCES: Population figures from: US Census Bureau, Population Estimates Program State Population Estimates: Annual Time Series, July 1, 1990 to July 1 1999. Personal Income figures from US Department of Commerce, Economics and Statistics Administration Bureau of Economic Analysis. Regional Economic Information System. State Annual Summary Tables 1969-1999 for the states and BEA regions in the US, May 2000 Medicaid State Share figures from HCFA Financial Management report for the years listed.

tax effort has matched its capacity to generate revenues with no net increase or redistribution of the burden.

The overall tax structure in Oregon is highly progressive. Unlike many States, Oregon does not rely on a sales tax to generate revenue. Previous studies of the incidence of sales taxes indicate that they are extremely regressive with respect to income—that is, low-income individuals pay a significantly higher proportion of their income in sales taxes than wealthier individuals, (Pechman, 1985). Instead, Oregon's primary revenue engine is the personal income tax, which is often considered to be a progressive form of taxation. The Oregon income tax rate ranges from five percent of taxable income under \$2,300 per annum to nine percent of taxable income over \$11,600. Although the State's income tax structure is progressive, it would appear that many low- and moderate-income Oregon residents fall into the highest tax bracket. Two other progressive General Fund revenue sources, the corporate income tax and the inheritance tax, also place a larger share of the financial burden on high-income individuals.

Oregon's tax structure also contains some regressive elements. Most significantly, the tobacco taxes represent a form of sales tax, and these taxes are even more regressive given the fact that low-income individuals are more likely to use tobacco products than wealthier individuals. While tobacco taxes may not generate as much revenue as the personal income tax in Oregon, the incidence of these taxes counteract the State's essentially progressive tax structure. Nevertheless, greater State spending on Medicaid involves a redistribution of income and benefits from the better-off segments of the population in Oregon to the poor and near-poor.

4.5 Competing Claims on State Revenues

Table 4-4 demonstrates that, despite the growth in Medicaid expenditures as a proportion of total State spending between 1991 and 1997, outlays for elementary and secondary education remain the single largest component of the State budget. In fact, even as the proportion of total State funds dedicated to Medicaid increased from 9.3 percent to 12.4 percent over this period, funding for elementary and secondary education expanded from less than 11 percent of State expenditures in 1991 to roughly 17 percent of total outlays in 1997. On the other hand, outlays for higher education have contracted as a proportion of total State funds, falling from 16 percent to less than 11 percent over the seven-year period. (It should be noted that, according to the NASBO expenditure reports, combined federal and State spending on higher education in Oregon increased from just under \$1.2 billion in 1991 to approximately \$1.4 billion in 1997, even though the State's higher education budget share fell considerably.)

Compared to the average size of Medicaid programs across all states, Table 4-4 indicates that the proportion of total State funds consumed by Oregon Medicaid was considerably smaller than the national average in both 1991 and 1997. Whereas the average proportion of State funds set aside for Medicaid grew from 13.6 percent to 20 percent, nationally, the Medicaid share of Oregon's total budget only increased from 9.3 percent to

Table 4-4
State Spending By Function as a Percent of Total State Expenditures in Oregon*

<u>Fiscal Year</u>	Elementary & Secondary <u>Education</u>	Higher Education	Cash <u>Assistance</u>	<u>Medicaid</u>	Public Safety	<u>Transportation</u>	All Other
1991	10.7%	16.0%	2.3%	9.3%	3.0%	9.3%	49.6%
1992	12.6	15.6	2.9	9.1	2.1	6.8	50.9
1993	14.9	15.0	2.8	10.2	2.1	6.5	48.4
1994	13.8	14.5	2.2	10.2	1.9	7.6	49.9
1995	15.1	15.2	2.1	13.4	2.2	8.0	44.0
1996	17.8	11.4	1.9	13.5	5.0	7.6	42.8
1997	16.7	10.5	2.0	12.4	4.7	7.1	46.6
1991 National Average	22.4	11.9	4.9	13.6	3.6	10.2	33.4
1997 National Average	21.7	10.6	3.1	20.0	3.8	8.9	31.9

NOTE:

SOURCE: National Association of State Budget Officers' Annual Expenditure Reports, 1991-1997.

^{*} Total State expenditures represent aggregate outlays from Oregon's General Fund, other funds earmarked for specific programs, and bonds.

12.4 percent between 1991 and 1997. Hence, although Oregon Medicaid has consumed over one-tenth of the total State budget over the past few years, the program remains a considerably smaller component of total State spending than does the average State Medicaid program. The relatively small share of Oregon's fiscal resources devoted to its Medicaid program compared with other states may be attributable to socio-economic differences between the Oregon population and the U.S. population as a whole. U.S. Census Bureau data on poverty reveal that the proportion of Oregon residents living below the federal poverty level fell from 12.4 percent in 1989 to 11.5 percent in 1997, while the national poverty rate *rose* slightly from 13.1 percent to 13.5 percent. Therefore, even with the Medicaid expansions under OHP, it is arguable that the share of Oregon's fiscal resources allocated to Medicaid would be smaller than the national average given the State's shrinking poverty rate relative to the national poverty rate.

It is also important to note that outlays included in the "All Other" category in Table 4-4 are much higher in Oregon than in the average state. Over a seven-year period, the "All Other" category, which includes spending for economic development, environmental projects, parks and recreation, and other miscellaneous State programs, accounted for almost half of Oregon's total expenditures, as compared to the national average of 31-33 percent. Within Oregon's annual budget, then, more resources are devoted to these programs, thus leaving a smaller share of funds for programs such as Medicaid.

4.6 Revenue Sources Earmarked for OHP

While the State's General Fund and federal Medicaid matching are the two largest contributors to Oregon's Medicaid program, other earmarked revenue sources within the State are becoming an increasingly significant component of the Medicaid budget. This section examines the role of tobacco tax revenues and OHP premium collections in financing the Medicaid program in Oregon.

4.6.1 Tobacco Tax Revenues

In November 1996, Oregon voters approved Ballot Measure 44, which increased the tax on cigarettes by 30 cents per pack and the tax on other tobacco products by 30 percent. Ten percent of the revenues generated by the tobacco tax increase were to be channeled into tobacco use reduction efforts while the remaining 90 percent of revenues were explicitly earmarked for the Oregon Health Plan. In other words, of the 30 cent per pack increase, 27 cents would be allocated to OHP for expanding coverage and 3 cents would go towards the statewide tobacco use reduction campaign. It was estimated that the tobacco tax increase would yield \$154 million for OHP in the 1997-1999 biennium, enabling the State to insure 60,000 to 70,000 individuals in addition to the roughly 350,000 individuals already covered by the program.

Prior to the implementation of this voter-approved tax increase in February, 1997, the Legislature enacted a "temporary" tax of 10 cents per pack on cigarettes in 1993 in order to augment General Fund monies allocated to OHP. Hence, all revenues from this tax

increase were set aside for OHP. Although ostensibly a temporary tax increase, the Legislature voted to extend this 10 cent tax increase both in 1995 and again in 1997.

In total, the cigarette tax in Oregon amounts to 68 cents per pack. According to the Oregon Department of Revenue, the Legislature is required to allocate a total of 37 cents to OHP (54 percent of total revenues) and 3 cents to the tobacco use reduction campaign. Of the remaining 28 cents, the General Fund receives 22 cents, cities and counties receive 4 cents, and 2 cents goes to the Oregon Department of Transportation. The tax on other tobacco tax products amounts to 65 percent of the purchase price, of which 27 percent goes to OHP, 3 percent goes to tobacco use reduction, and 35 percent goes to the General Fund. This new distribution approach was implemented in February, 1997.

Table 4-5 outlines both the level of revenues generated by the tobacco tax and how these revenues have been distributed over the past seven years. Over this period, the tax rate for cigarettes rose from 28 cents per pack to 68 cents per pack. Consequently, total tobacco tax revenues increased substantially, expanding by approximately 132 percent. However, as Table 4-6 indicates, the total number of cigarette packs purchased in Oregon declined by about six percent between FY1992 and FY1998, suggesting that, in the absence of additional tax increases, revenues from the tobacco tax may begin to drop off.

The dramatic increase in tobacco tax revenues has been accompanied by a fundamental shift in the distribution of the tobacco tax-generated funds. As the tax rates increased, an increasing share of the revenues has been channeled into OHP. According to Table 4-5, between FY1992 and FY1998, the General Fund's share of tobacco tax monies

Table 4-5

Tobacco Tax Collection and Distribution, FY 1992 - 1998 (in millions)

	<u>-</u>	T	otal Collectio	ns	Distribution			
<u>Fiscal Year</u>	Cigarette Tax Rate (per pack)	<u>Total</u>	<u>Cigarette</u>	Other Tobacco <u>Products</u>	General <u>Fund</u>	<u>OHP</u>	Other <u>Programs**</u>	
1991-1992	\$0.28	\$87.5	\$80.2	\$7.3	\$70.3		\$17.2	
1992-1993	0.28	86.2	78.2	8.0	69.4		16.8	
1993-1994	0.33	104.0	96.0	8.0	70.9	\$16.8	17.0	
1994-1995	0.38	117.1	107.2	9.9	72.0	28.2	16.9	
1995-1996*	0.38	120.2	109.2	11.0	74.0	29.0	17.2	
1996-1997*	0.51	154.6	141.8	12.8	65.5	68.7	20.5	
1997-1998*	0.68	203.0	183.5	19.5	67.3	108.0	27.8	
Percent Change, 1991-1992 to 1997-1998	142.9%	132.0%	128.7%	167.6%	-4.3%	542.7%	61.5%	

NOTES:

SOURCES: Department of Revenue Monthly Receipt Statements.

^{*} The distribution of tobacco tax revenues for these years are estimates based on legislatively-determined distribution criteria.

^{**} Tobacco tax revenues are also allocated the Department of Transportation, city and county governments, and the tobacco use reduction campaign is also included in this category (beginning in FY1996-1997).

Table 4-6
Trends in Cigarette Sales, 1992 - 1998

Fiscal Year	Cigarette Tax Rate (per pack)	Cigarette Tax <u>Revenues</u>	Number of Packs Purchased (in millions)*
1991-1992	\$0.28	\$80.2	286.5
1992-1993	0.28	78.2	279.3
1993-1994	0.33	96.0	292.7
1994-1995	0.38	107.2	282.1
1995-1996*	0.38	109.2	287.3
1996-1997*	0.51	141.8	278.0
1997-1998*	0.68	183.5	269.9
Percent Change, FY1992 to FY1998	142.9%	128.7%	-5.8%

NOTES:

SOURCES: Department of Revenue Monthly Receipt Statements.

^{*} These figures were calculated by dividing total cigarette revenues by the per pack cigarette tax rate for each fiscal year.

fell slightly (-4.3 percent) from \$70.3 to \$67.3 million. In contrast, the pool of tobacco tax revenues earmarked solely for OHP swelled by over 500 percent.

Tobacco Revenues and the 1997-99 State Budget. As mentioned above, Ballot Measure 44 stipulated that 90 percent of the proceeds from the 30 cent tobacco tax increase be invested in OHP. The language in the ballot measure was not specific as to *how* the OHP-dedicated tobacco tax proceeds were to be spent; however, proponents of the ballot initiative asserted that the funds would be used to expand health insurance coverage under OHP. While publicly-financed health insurance has been expanded as result of the tax increases, a significant share of the revenues have been used to maintain existing services offered under OHP.

In his original proposal for the 1997-1999 biennial budget, Governor Kitzhaber called for a \$76.7 million reduction in General Fund outlays for OHP. These savings would result from (a) a cap on the enrollment of expansion eligibles; (b) the elimination of adult dental services; (c) accelerated enrollment of eligibles in managed care plans; and (d) a funding line shift from line 578 to line 520. However, as part of the Governor's "Health Investment Budget," \$70.7 million in expected tobacco tax revenues would partially restore the aforementioned cuts. In particular, the enrollment cap would be removed, adult dental services would be restored, and the funding line would shift up to line 573 with the additional tobacco tax-generated funds.³

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³ As discussed in Chapter 4, HCFA ultimately approved of setting the coverage threshold at line 574.

In addition, Governor Kitzhaber proposed investing \$22.8 million of the expected tobacco tax revenues in raising the OHP income threshold for pregnant women and children age six and under from 133 percent of the federal poverty level (FPL) to 185 percent. Governor Kitzhaber also proposed using \$47.6 million in funds generated by the 30 cent tobacco tax increase to create a health insurance subsidy program for individuals and families with incomes above 100 percent of the FPL.

OHP expansion and insurance subsidy program in favor of funneling more tobacco tax revenues into maintaining existing OHP services. Specifically, the Legislature set aside \$135.6 million for OHP maintenance and appropriated \$21.6 million for the OHP expansion. The health insurance subsidy program received \$23.4 million. The Legislature also voted to extend the 10 cent tobacco tax increase first introduced in 1993, a measure that was expected to yield \$49 million in additional revenues to maintain existing OHP services.

Hence, of the \$229.6 million in total tobacco tax monies earmarked for OHP in the 1997-1999 biennium, \$45 million went into expanding health insurance coverage while \$185 million, or roughly 81 percent of total revenue, substituted for General Fund outlays to finance the current program. As a result, \$185 million in General Fund revenues were available for investment in other State-financed programs.

Tobacco Revenues and the Proposed 1999-2001 Budget. The State's increasing reliance on earmarked tobacco funds to finance OHP has been undermined by projections of a significant shortfall in tobacco tax revenues in the 1999-2001 biennium. In total, OMAP officials estimate that total tobacco tax revenues earmarked for OHP will plummet by \$83.9

million over two years, creating a roughly 15 percent shortfall in the 1997-1999 biennial OHP budget. Decreased tobacco product consumption and the sunsetting of the 10 cent "temporary" tax increase passed on 1993 are expected to reduce revenues by \$32.5 million, or roughly 40 percent of the \$84 million shortfall. Further limitations in tobacco tax revenues available to OHP in the next biennium are due in part to the decision to use more than 24 months of tobacco revenues in the 1997-1999 OHP budget, essentially borrowing from expected future revenues. These limitations will widen the gap in the 1999-2001 budget by an additional \$51.4 million, contributing 60 percent to the shortfall.

Given this forecasted decrease in tobacco tax funds, the State will have to increase its General Fund contribution to the Medicaid program and/or find new revenue sources to support the current Medicaid program. A new stream of funds may flow from the legal settlement between States and national cigarette manufacturing companies. Oregon expects to receive \$2.2 billion over the next 25 years, of which \$180.6 million will be available for the 1999-2001 biennial budget. Although several issues surrounding the settlement funds have yet to be resolved, several lawmakers have proposed using the funds to backfill the State's Medicaid budget, thus freeing up General Fund revenues for other programs. The Kitzhaber administration has proposed replacing at least \$70 million of General Fund revenues earmarked for OHP with tobacco settlement funds.

4.6.2 OHP Premiums

To address a projected shortfall in its earlier 1995-1997 biennial OHP budget, OMAP requested permission from HCFA to institute monthly premiums for the OHP expansion population. According to OMAP's projections, the premiums were expected to provide an additional \$13.2 million to the State's share of the 1995-1997 OHP biennial budget. After agreeing to provide exemptions for certain types of hardship cases, Oregon began charging expansion eligibles monthly premiums based on a sliding scale in December, 1995.

Premiums vary by family size and income. For a single person, premiums range from \$6.00 per month for those earning less than 50 percent of the FPL to \$20.00 per month for those within 86 to 100 percent of the FPL. For a family of four or more, the monthly premium ranges from \$7.50 for families earning less than 50 percent of the FPL to \$28.00 for families within 86 to 100 percent of the FPL.

Although premium charges were expected to generate \$13.2 million in the 1995-1997 biennium, OMAP collected only \$10.3 million. After netting out payment to the third-party administrator responsible for collecting premiums, the State garnered a total of \$8.4 million. This shortfall resulted from a delay in the implementation of the sliding scale methodology for determining premiums as well as a lower-than-expected collection rate. With the federal government contributing approximately \$3.00 for every \$2.00 spent by State, the \$8.4 million in revenues actually translated into \$21.0 million in additional funds for OHP.

References

Advisory Commission on Intergovernmental Relations. <u>1991 State Revenue Capacity and Effort</u>. 1993.

Barrilleaux CJ, and ME Miller: "Decisions Without Consequences: Cost Control and Access in State Medicaid Programs." *Journal of Health Politics, Policy, and Law*, 17(1):97-118, Spring 1992.

Bruen BK: HCFA Public Use Medicaid Data and Section 1115 Waiver States: A Brief Overview of Data Quality. Washington, DC: The Urban Institute. Draft Report, 1998.

Craig SG and RP Inman: "Education, Welfare, and the 'New' Federalism: State Budgeting in a Federalist Public Economy," in <u>Studies in State and Local Public Finance</u>, HS Rosen (editor). University of Chicago Press: Chicago, IL, 1986.

Cromwell J, R Schurman, S Hurdle, and G Wedig: *The Evolution of State Medicaid Programs*. Waltham, MA: Center for Health Economics Research. ASPE Grant No. 066A-83, June 1984.

Cromwell J, A Boulis, KW Adamache, *et al.*: *Examining the Medicaid Fiscal Crisis*. Waltham, MA: Center for Health Economics Research. HCFA Contract No. 18-C-90028/1-02, 1995

Grannemann TW: "The Demand for Publicly Financed Medical Care." In <u>The Role of Interdependent Preferences</u>, Northwestern University Press (editors). Evanston, IL, 1979

Health Care Financing Administration: <u>State Quarterly Statements of Medicaid Expenditures for the Medical Assistance Program</u> (HCFA 64 Form), 1991-1998.

Health Care Financing Administration: <u>Statistical Report on Medical Care: Eligibles, Recipients, Payments, and Services</u> (HCFA 2082 Form), 1991-1998.

Hill IT: The Medicaid Expansions for Pregnant Women and Children: A State Program Characteristics Information Base. Washington, DC: Health Systems Research, Inc. Prepared for the Health Care Financing Administration, February, 1992.

Musgrave RA, and PB Musgrave: <u>Public Finance in Theory and Practice</u>. Fifth Edition, McGraw-Hill, Inc., 1989.

National Association of State Budget Officers: State Expenditure Report, 1991-1997.

Oregon Department of Human Resources: <u>Legislatively Adopted Budget Report</u>, 1993, 1995, and 1997.

Oregon Department of Revenue: Monthly Receipt Statements, 1991-1998.

Oregon Office of Medical Assistance Programs: <u>Oregon Health Plan Medicaid</u> <u>Demonstration: Analysis of Federal Fiscal Year Average Costs</u>, 1994-1999. Prepared by Coopers & Lybrand.

Orr L: "Income Transfers as a Public Good: An Application to AFDC." *American Economic Review* 66(3):359-371, June 1976.

Pechman JA: Who Paid Taxes: 1966-1985? The Brookings Institution: Washington, DC, 1985.

Sloan FA: "State Discretion in Federal Categorical Assistance Programs: Analysis of Variations in Medicaid Payments for Physicians' Services." Unpublished paper, 1979.

Appendix A

Coopers & Lybrand's Cost Estimation Methods

Appendix A

Construction of Savings Estimates from Prioritizing Services

To assess the priority list's role as a cost-containment mechanism, the State's methodology for estimating cost savings generated by the priority list must first be examined. This section describes the methodology employed by Coopers & Lybrand to derive the average monthly per capita costs and illustrates how the monthly per capita cost estimates for various coverage thresholds translate into projected savings for OHP.

Our analysis is based primarily on the discussion of actuarial methodology provided in Coopers & Lybrand's "Analysis of Federal Fiscal Year 1994 & 1995 Average Costs," which outlines cost projections for the first two years of the demonstration. It is important to note that the cost estimation methodology—and, in particular, some of the underlying assumptions regarding the medical costs of expansion eligibles—have since been modified to reflect actual costs under OHP.

Coopers & Lybrand's Actuarial Methods in Costing Conditions

The primary data bases for the cost estimates included claims data from Oregon's Medicaid Management Information System (MMIS), and from Blue Cross/Blue Shield of Oregon (BCBSO). In addition, data on cost-to-charge ratios were obtained from the Oregon Office of Health Policy and the federal Resource Based Relative Value Scale (RBRVS) data bases. Mental health utilization and cost data were provided by the Oregon Mental Health Division and two Oregon-based mental health care plans.

To calculate the monthly per capita costs associated with different threshold levels, actuaries at Coopers & Lybrand first had to determine the average per member per month (PMPM) cost for covering all services included in the priority list. First, expected utilization rates for 90 general categories of service (e.g., inpatient maternity care, physician office visits) were calculated by summing up the units of service for all claims in a given service category and dividing by the number of member-months of enrollment. The current eligibles' utilization rates were based on MMIS claims data, while estimates for the expansion population were based on the utilization rates of a commercial population enrolled in BCBSO, adjusted for higher anticipated outpatient and mental health utilization rates. The rates for each eligibility group were also adjusted to account for differences in the length of eligibility.

The next step in deriving an average PMPM cost involved calculating the average cost for each service category. The average allowed *charge* for each service category was first computed for the current and expansion eligible populations using the MMIS and BCBS claims data, respectively. After deriving average charge levels based on claims data, outliers were removed to avoid skewing the average charge calculations. The actuaries then employed several different data bases to convert charges to costs for each of the 90 service categories. For hospital inpatient and outpatient costs, cost-to-charge ratios were taken from the Oregon Office of Health Policy's hospital cost reports and Medicare hospital cost reports. Cost conversions for professional services were based on both historic data from health plans on physician reimbursement rates as well as the RBRVS conversion factors. For other service categories, the actuaries relied on cost reports from various sources to determine the proportion of charges allocated to overhead expenses.

Several adjustments to the average PMPM cost estimates were made. First, they were updated to the rate year using different indices for different services. Second, an administrative allowance was added on to cover managed care activities. Third, a negative adjustment was made for expected managed care savings. Further demographic adjustments were made to control for differences in age, gender, and severity of illness between current eligibles and the expansion population. Finally, adjustments were made for the spillover fee-for-service spending of eligibles who eventually enter managed care during the year.

Actuarial Adjustment for the Priority Threshold

The actuaries' next task involved calculating the average PMPM cost for covering services above a specified cut-off line on the priority list. To estimate the average cost for various threshold levels, it was first necessary to compute the average cost associated with each condition-treatment pair, or "line item," on the priority list. The primary data sources for these calculations were the MMIS and Mental Health Division data bases, which provided detailed expenditure and utilization data for each line item. After selecting a five percent sample of claims that covered all line items, the actuaries converted the claim charge amounts to projected costs using conversion factors for the different service categories.

The next step involved classifying each claim in a specific line item or set of related line items that corresponded to one of the 90 service categories discussed in the previous section. The claims were first divided into surgery-related claims and claims for medical therapy. Within each of these categories, the actuaries matched the claims with one or more of the line items based on the primary procedure code. The expenditures documented on each claim were then allocated to the

corresponding line items using a complex methodology for distributing costs among different treatments for a single condition. Expenditures associated with ancillary service claims and prescription drug claims were also allocated to specific line items. To calculate a total expenditure level for each line item, the surgical, medical therapy, ancillary service, and prescription drug expenditures associated with each line item were combined.

The aggregated expenditure levels were then converted into monthly per capita expenditures for each line item. First, the percentage of total expenditures for all services within a condition/pair was calculated by dividing the dollars for a given line item by the total dollars for all services included in the data base. After calculating each line item's share of the total dollar amount, the relative proportions of the service categories were adjusted to reflect differences in utilization between the expansion eligibles and current eligibles. The percentage of total expenditures represented by each line item was then multiplied by the average PMPM cost for covering all services to determine the average monthly per capita cost associated with each line item.

The calculation of the average monthly per capita cost for various threshold levels was relatively straightforward. The average monthly per capita cost for each individual line item above the threshold were cumulated to arrive at the total average monthly per capita cost for a given funding line. For instance, to calculate the average monthly per capita cost for covering services up to line 600, the individual monthly per capita cost estimates for lines 1 through 600 were aggregated to produce a total average per capita cost for this threshold.

Using the monthly per capita cost estimates developed by Coopers & Lybrand, program savings for the different thresholds were projected by first calculating the total cost of each threshold. The total cost for a given funding line was calculated as the product of the average

monthly per capita cost for that funding line and the number of projected eligibles. This product was then multiplied by 12 to get a total annual figure. Eligibility projections were estimated by the Lewin Group based on (a) historic eligibility trends in Oregon's Medicaid program for the current eligible population; and (b) changes in eligibility for a subsample of Oregon residents included in the Current Population Survey and with demographic and socioeconomic characteristics similar to those of the expansion population.

The following equation illustrates how the total cost for a given threshold was calculated:

$$TC_c = \sum_{l} \sum_{p} CST_{plc}$$

where TC_c = total expected program costs for all eligibles in the cth category (e.g., AFDC category); and CST_{plc} = the costs associated with the pth eligible for the condition/treatment pair in line l.

Next, a cost share for each line item is created as:

$$CSH_{lc} = \sum_{n} CST_{nlc} / TC_{c}$$

where CSH_{lc} = the share of total costs within the cth category spent on the lth condition/treatment pair. Within an eligibility category, a set of hundreds of cost shares are computed by line item, each line item implicitly "weighted" by both the number of patient users and the costliness of their care.

Armed with the vector of cost shares for 14 eligibility categories, Coopers & Lybrand next multiplied the share vectors (CSH_{lc}) by the overall per capita rates (PCC_c) for each of four different delivery systems (i.e., Full Capitation, Physician Care Organization, Primary Care Case Management, and Fee-for-Service). This gives an estimate of the per capita cost of each of the

Physician care organizations were capitated for outpatient services only; they were phased out by OMAP in 1995 and replaced by fully capitated plans.

hundreds of individual line items. A weighted average total per capita rate is then produced using expected eligibles in each eligible-delivery system cell, i.e.,

$$PCC_{mc} = \sum_{l}^{m} CSH_{lc} \bullet PCC_{c}$$

where PCC_{mc} = the estimated per capita (PMPM) cost for the cth eligible group up to the mth line item (e.g., line item 574). Finally, Coopers & Lybrand sorted the list of condition/treatment line items according to the priorities given by the Oregon Health Plan and cumulated the per capita estimates for each of the line items.

While the actuary could have calculated per capita estimates directly for the claims data using estimates of eligible-months of the population generating the claims, the estimates would have been time dependent. By first constructing condition/treatment cost shares (assumed fixed for periods of time), the actuary can independently construct and update per capita rates for other populations of interest (e.g., AFDC) and then decompose the rates by line item using the cost weights. It does so, of course, assuming that the relative costliness of condition/treatment pairs do not vary within or across eligible groups. This seems a reasonable assumption over short periods of time (e.g., less than 5-8 years).

Projected savings associated with a certain threshold were computed by Coopers & Lybrand as the difference between the total estimated cost cumulated to a given threshold and the projected cost of funding the traditional Medicaid benefit package covering all condition/treatment pairs, holding other demonstration-related factors (e.g., eligibility expansions, provider reimbursement increases) constant.